

# TOLL BRIDGE PROGRAM OVERSIGHT COMMITTEE

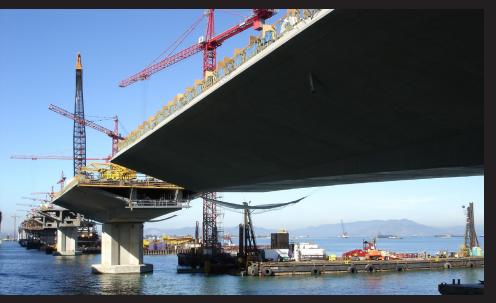
MEETING MATERIALS
October 30, 2007

CALTRANS

BAY AREA TOLL AUTHORITY

CALIFORNIA TRANSPORTATION COMMISSION















# Letter of Transmittal

DATE: October 23, 2007

TO: Toll Bridge Program Oversight Committee

(TBPOC)

**FR:** Program Management Team (PMT)

**RE:** TBPOC Meeting Materials Packet – October 30, 2007

Attached is the <u>TBPOC Meeting Materials Packet</u> for the October 30<sup>th</sup> meeting. The packet includes memoranda and reports that will be presented at the meeting. A <u>Table of Contents</u> is provided following the <u>Agenda</u> to help locate specific topics. Items that are to be included after the mail-out will be printed on blue paper.



# **TBPOC MEETING** October 30, 2007, 1:00 PM - 4:00 PM Caltrans Headquarters, Director's Conference Room 1120 N Street, Sacramento, CA

	<b>Topic</b>	Presenter	Time	Desired Outcome
1.	CHAIR'S REPORT	W. Kempton, CT	5 min	Information
2.	CONSENT CALENDAR			
	a. September 19, 2007 Meeting Minutes*	A. Fremier, BATA	1 min	Approval
	b. October 11, 2007 Conference Call Minutes*	A. Fremier, BATA	1 min	Approval
3.	PROGRESS REPORTS			
	a. Draft October 2007 Monthly Progress Report***	A. Fremier, BATA	1 min	Information
	b. Draft 3 <sup>rd</sup> Quarter Report, September 30, 2007***	A. Fremier, BATA	1 min	Info/Approval
4.	PROGRAM ISSUES			
	a. TBSRP Capital Outlay Support (COS) Update*	A. Banani, CT	15 min	Information
		P. Lee, BATA		
	b. Coordination of Permit Requirements with Related	T. Anziano, CT	10 min	Info/Approval
	External Planning*			
<b>5.</b>	SAN FRANCISCO-OAKLAND BAY BRIDGE			
	UPDATES			
	a. Yerba Buena Island			
	1) Update: Labor Day Weekend Closure for	T. Anziano, CT	10 min	Information
	Detour West Tie In Work/YBI Viaduct	·		
	Replacement*			
	2) Contract Change Orders			
	a) CCO No. 91 S1*	T. Anziano, CT	10 min	Approval
	b) CCO No. 73*	T. Anziano, CT	10 min	Approval
	3) Budget Balance Beam*	T. Anziano, CT	5 min	Information
	b. SAS and OTD General Update*	T. Anziano, CT	5 min	Information
	c. Project-Specific Insurance*	T. Anziano, CT	5 min	Approval
	d. Jones Act*	T. Anziano, CT	5 min	Information
	e. Skyway Project Closeout*	T. Anziano, CT	5 min	Information
6.	NEW BENICIA-MARTINEZ BRIDGE			
	a. BASE Security System*	A. Fremier, BATA	5 min	Approval
7.	OTHER BUSINESS	W. Kempton, CT		n/a
	a. TBPOC Closed-Door Discussion	•		

<sup>\*\*\*</sup> Final Documents still in process; to be provided as soon as available.
\*\*\* Stand alone document included in the binder.



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# **TBPOC MEETING October 30, 2007**

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1	1	CHAIR S REFORT (No attachments)
2	2	CONSENT CALENDAR
		a. September 19, 2007 Meeting Minutes*
		b. October 11, 2007 Conference Call Minutes*
3	3	PROGRESS REPORTS
		a. Draft October 2007 Monthly Progress Reports***
		b. Draft Third Quarter Report, September 30, 2007***
4	4	PROGRAM ISSUES
		a. TBSRP Capital Outlay Support (COS) Update*
		b. Coordination of Permit Requirements with Related
		External Planning*
5	5	SAN FRANCISCO-OAKLAND BAY BRIDGE UPDATES
		a. Yerba Buena Island
		1) Update: Labor Day Weekend Closure for Detour West
		Tie-In Work/YBI Viaduct Replacement*
		2) Contract Change Orders
		a) CCO No. 91 S1*
		b) CCO No. 73*
		3) Budget Balance Beam*
		b. SAS and OTC General Update*
		c. Project-Specific Insurance*
		d. Jones Act*
		e. Skyway Project Closeout*
6	6	NEW BENICIA-MARTINEZ BRIDGE
		a. BASE Security System*
7	7	OTHER BUSINESS (No attachments)
		a. TBPOC Closed-Door Discussion

- Attachments
- Final Documents still in process; to be provided at the meeting Stand alone document included in the binder

**Item 1: Chair's Report** 

**No Attachments** 

# ITEM 2: CONSENT CALENDAR



# Memorandum

TO: Toll Bridge Program Oversight Committee DATE: October 23, 2007

(TBPOC)

FR: Andrew Fremier, Deputy Executive Director, BATA

RE: Agenda No. - 2a

Consent Calendar

Item- September 19, 2007 Meeting Minutes

October 11, 2007 Conference Call Minutes

# **Recommendation:**

APPROVAL

# **Cost:**

N/A

# **Schedule Impacts:**

N/A

# Discussion:

The Program Management Team has reviewed and requests TBPOC approval of the minutes for the September 19, 2007 meeting and October 11, 2007 conference call.

# **Attachments:**

September 19, 2007 Meeting Minutes October 11, 2007 Conference Call Minutes

# **ITEM 2: CONSENT CALENDAR**

a. September 19, 2007 Conference Call Minutes



# TOLL BRIDGE PROGRAM OVERSIGHT COMMITTEE

CALTRANS BAY AREA TOLL AUTHORITY CALIFORNIA TRANSPORTATION COMMISSION

# **MEETING MINUTES**

September 19, 2007, 9:30 AM – 11:00 AM Caltrans Headquarters, Director's Conference Room, 1120 N Street, Sacramento, CA

**Attendees**: TBPOC Members: Will Kempton, Steve Heminger, and John Barna;

<u>PMT Members</u>: Tony Anziano, Andy Fremier, and Stephen Maller; Participants: Jose Aguirre, Ali Banani, Nancy Bobb (FHWA), Michele

DiFrancia, Beatriz Lacson, Peter Lee, Brian Maroney, Dina Noel, Cheryl Pirtle,

Judis Santos, and Bijan Sartipi

Convened: 9:30 AM

	Items	Action
1.	<ul> <li>CHAIR'S REPORT</li> <li>The Chair expressed the TBPOC's appreciation and thanks to all who worked very hard on the bridge replacement effort over the Labor Day weekend.</li> </ul>	
2.	CONSENT CALENDAR  BATA presented the following for approval.  a. June 27, 2007 Conference Call Minutes  b. July 27, 2007 Conference Call Minutes  c. August 2, 2007 Meeting Minutes  d. August 24, 2007 Conference Call Minutes  e. 2008 TBPOC Meeting Calendar  BATA presented, for information, the 2007 TBPOC Meeting Calendar which was revised to reflect the PMT trip to China in October. The 2008 calendar was also revised to include the quarterly PMT trips to China.	<ul> <li>The TBPOC APPROVED the June 27, July 27, August 24, 2007 Conference Call Minutes, and August 2, 2007 Meeting Minutes.</li> <li>It was noted that action on the re-striping of the toll plaza area (see June 27, 2007 Conference Call Minutes, page 2 of 5, Action column, 2nd bullet) was referred to Department staff.</li> <li>The TBPOC ACCEPTED the 2007 and 2008 TBPOC Meeting Calendars as presented.</li> </ul>

	Items	Action		
3.	<ul> <li>PROGRESS REPORT</li> <li>BATA presented the Draft September 2007</li> <li>Monthly Progress Report for information.</li> <li>Approval of this report by the TBPOC through delegated authority to the PMT is anticipated as soon as updated expenditure data through August 31, 2007 and final comments are incorporated.</li> <li>The Chair clarified that approval authority delegated to the PMT assumes TBPOC member review of these reports.</li> </ul>	<ul> <li>For the record, the TBPOC through delegated authority to the PMT APPROVED the Second Quarter Report Ending June 30, 2007 on August 13, 2007.</li> <li>For the record, the TBPOC APPROVED the July and August 2007 Monthly Progress Reports through their respective PMT members on August 7, 2007 and September 4, 2007, respectively.</li> </ul>		
4.	PROGRAM ISSUES			
	<ul> <li>a. Dumbarton-Antioch Bridges Retrofit Strategy</li> <li>The Department gave a slide presentation of the seismic evaluations of the two bridges.</li> <li>Comments/discussion included: <ul> <li>The Department recommends that the Antioch Bridge be categorized as a regular bridge, at a "no-collapse" level of retrofit.</li> <li>The Department recommends that the Dumbarton Bridge be categorized as an "important" bridge (similar to the Richmond-San Rafael, Benicia-Martinez and San Mateo Bridges), but not as a lifeline route (like the Bay Bridge).</li> <li>While the Dumbarton and Antioch Bridges may not currently be a part of the AB144 Toll Bridge Program, and determination of the retrofit strategy for each bridge lies with the Department, the Chair intends to seek input from the TBPOC in making this decision.</li> <li>The Department suggested that</li> </ul> </li> </ul>			

**Items** Action

- such a decision may not be required until March 2009. However, the TBPOC desires to make an endorsement at this time, with the flexibility to take a different approach in the future, as needed.
- Incorporating these bridges into the Toll Bridge Program will require legislation, and will be the subject of a separate discussion.
- S. Heminger handed out to the other members of the TBPOC a list of bridges with their respective seismic strategy entitled "Seismic Retrofit Program, System Bridges Design Basis and Status".
- B. Richmond-San Rafael Bridge California Department of Fish and Game (CDFG)
- The Department gave the current status of this on-going negotiations with the CDFG as related to impacts during bridge construction, on salmonid species listed under the California Endangered Species Act.
- Comments/discussion included:
  - The issue has been resolved with a \$1.5 million settlement and payment is being processed.
  - The settlement closes out this project.
  - It was suggested that a letter of appreciation be sent to R.
     Iwasaki, et al., for successfully negotiating with the Department of Fish and Game and achieving substantial savings for the Program.
- c. TBSRP Capital Outlay Support Update
  - Agenda item deferred.

- The TBPOC voted 2-0-1 (with J. Barna abstaining) to ENDORSE the Department's recommended retrofit strategy for the Dumbarton Bridge as "important" and Antioch Bridge as "regular".
  - The Department to keep the TBPOC updated and present this item back to the TBPOC for final decision.

The Toll Bridge Program
 Manager to draft the letter of
 appreciation for TBPOC
 signature, and look into the
 possibility of award to the
 personnel involved in the
 negotiations.

Items	Action
Items	Action
<ul> <li>d. Westar Litigation – Request for Settlement Authority</li> <li>The Department Asst. Chief Counsel gave a background summary, current status, financial exposures, as well as the recommended next steps to take; and requested authorization for the Department to negotiate a settlement during a scheduled mediation on October 12, 2007, in an amount to be established by the TBPOC.</li> </ul>	• The TBPOC <b>AUTHORIZED</b> the Department to negotiate a settlement in an amount not to exceed \$8 million.
5. SAN FRANCISCO-OAKLAND BAY	
a. Yerba Buena Island 1) Update: Labor Day Weekend Closure for Detour West Tie-In Work/YBI Viaduct Replacement • Agenda item deferred.	
<ul><li>2) Budget Balance Beam</li><li>Agenda item deferred.</li></ul>	
<ul><li>b. SAS and OTD General Update</li><li>Agenda item deferred.</li></ul>	
c. Jones Act <ul><li>Agenda item deferred.</li></ul>	
6. BENICIA-MARTINEZ BRIDGE	
a. Loading Sequence Review and	
Addendum 1  BATA presented an update with	
supporting copies of PowerPoint	
slides which gave a comprehensive	
look at the bridge details, a history of the maintenance observations, the	
changes made over the life of the	
bridge, and a review of upcoming contract work.	
BATA and the Department requested approval for Addendum No. 1 which	The TBPOC <b>APPROVED</b> Addendum No. 1, and

7/	A
Items	Action
contains minor quantity and item	<b>AUTHORIZED</b> the PMT to
changes, as well as clarification of	act on Addendum No. 2.
the contract specifications, at a	
minimal cost, and delegated	
authority for Addendum No. 2 which	
modifies the specifications to limit	
amount of work on the southbound	
direction of the bridge.	
<ul> <li>Comments/discussion included:         <ul> <li>Advisory signage is in place and observations indicate that most truck traffic prefers and uses the number 2 (center) lane. It is not necessary to change the advisory to mandatory.</li> <li>The existing bridge has been maintained well. The Department will continue to inspect the bridge on a regular basis during construction.</li> <li>The Department is exploring the development of an electronic monitoring system that will monitor stresses in the members without having to physically inspect the details.</li> <li>The entire rehabilitation program is currently being reviewed to ensure the toll bridges are being maintained to the highest standards.</li> <li>The FHWA representative indicated that the FHWA has issued an advisory that construction materials not overload bridges. She believes</li> </ul> </li> </ul>	The TBPOC CONFIRMED that the advisory signing for trucks is sufficient at this time.
that all bases have been covered	
with respect to the work on the	
Benicia-Martinez Bridge.	
7. Other Business	
<ul> <li>The TBPOC reconvened in the Chair's</li> </ul>	
office for a closed-door discussion.	

Adjourned: 11:34 AM

# **MEETING MINUTES**

 $\begin{array}{c} September\ 19,\ 2007,\ 9{:}30\ AM-11{:}00\ AM\\ Caltrans\ Headquarters,\ Director's\ Conference\ Room,\\ 1120\ N\ Street,\ Sacramento,\ CA \end{array}$ 

APPROVED BY:	
WILL KEMPTON, Director California Department of Transportation	Date
JOHN F. BARNA, Jr., Executive Director California Transportation Commission	Date
STEVE HEMINGER, Executive Director Bay Area Toll Authority	Date

# **ITEM 2: CONSENT CALENDAR**

b. October 11, 2007 Conference Call Minutes



# TOLL BRIDGE PROGRAM OVERSIGHT COMMITTEE

# TBPOC CONFERENCE CALL MINUTES

October 11, 2007, 4:00 PM – 4:15 PM

Participants: TBPOC Members: Will Kempton, Steve Heminger, and John Barna

PMT Members: Tony Anziano, Dina Noel (for Stephen Maller), and

Peter Lee (for Andy Fremier)

Other Participants: Michele DiFrancia, Beatriz Lacson, Brian Maroney,

Rod McMillen, and Bijan Sartipi

Convene	d: 4:03 PM	
	Items	Action
1.	Martinez Bridge  ■ BATA staff presented the recommendation for the TBPOC to approve an addendum to suspend the Existing Benicia-Martinez Bridge Modification Contract (04-0060A4), which is scheduled for a bid opening date of October 31st and a mandatory bidder outreach on October 16th, to further evaluate the re-decking of the existing span of the bridge.  □ Staff presented the opportunities associated with re-decking at this time when traffic can more easily be accommodated off the bridge, as well as the potential cost savings of redecking now versus in the future.  □ A preliminary estimate for the additional cost of the re-decking is \$60 million, with existing funding of \$37 million available. Additional funding options would need to be identified for the remaining cost of the work, e.g., program/project contingencies and rehabilitation funds.	The TBPOC DID NOT APPROVE an addendum to suspend the Existing Benicia-Martinez Bridge Modification Contract (04-0060A4), and directed staff not to proceed with the re-decking option.
	<ul> <li>While acknowledging that this is a BATA-initiated item and both BATA</li> </ul>	
	and the Department worked together to	

# (continued)

	Itama	Action
	Items develop this recommendation, the	Action
	BATA Executive Director disagreed with	
	the recommendation for the following	
	reasons:	
	<ul> <li>It is being proposed too late in the</li> </ul>	
	process when the bid is already	
	underway.	
	o The budget impact of at least \$30	
	million coming from the Rehabilitation or Toll Bridge	
	Programs is unappealing.	
	<ul><li>By comparison, the Richmond-San</li></ul>	
	Rafael Bridge is 10 years older than	
	the existing Benicia-Martinez	
	Bridge, and it is not being re-decked.	
	<ul> <li>There is a prioritization process for</li> </ul>	
	the bridges funded by the	
	rehabilitation program. Benicia- Martinez has not been prioritized	
	and is not on the funded list.	
	and is not on the funded list.	
•	Other comments/discussion included:	
	<ul> <li>It is appropriate that staff should</li> </ul>	
	bring these matters to the attention	
	of the TBPOC and should continue	
	to do so.	
	o There are other bridges, e.g.,	
	Dumbarton/Antioch, that are of greater concern than Benicia-	
	Martinez.	
	<ul> <li>While there are benefits to re-</li> </ul>	
	decking at this time, there are also	
	drawbacks, e.g., giving up 10 years of	
	life on the existing deck; the work	
	will likely cost considerably more	
	than the quick cost estimate of \$60	
	million.	
	<ul> <li>All things being considered, there are not enough compelling reasons</li> </ul>	
	to suspend the Existing Benicia-	
	Martinez Bridge Modification	
	Contract (04-0060A4).	

Adjourned: 4:12 PM

# TBPOC CONFERENCE CALL MINUTES October 11, 2007, 4:00 PM – 4:15 PM

APPROVED BY:		
WILL KEMPTON, Director California Department of Transportation	Date	-
JOHN F. BARNA, Jr., Executive Director California Transportation Commission	Date	
STEVE HEMINGER, Executive Director  Bay Area Toll Authority	Date	

# **ITEM 3: PROGRESS REPORTS**



# Memorandum

TO: Toll Bridge Program Oversight Committee DATE: October 23, 2007

(TBPOC)

FR: Andrew Fremier, Deputy Executive Director, BATA

**RE:** Agenda No. - 3a

**Progress Reports** 

Item- Draft October 2007 Monthly Progress Report

# **Recommendation:**

For Information Only

### Cost:

N/A

# **Schedule Impacts:**

N/A

# Discussion:

For the record, the PMT approved the September 2007 Monthly Progress Report through delegated TBPOC authority on October 2, 2007.

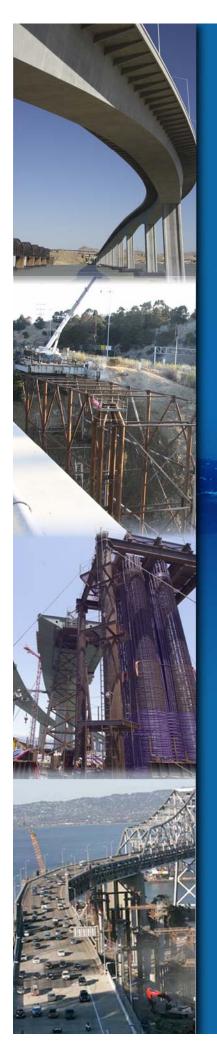
TBPOC approval of the draft October 2007 Monthly Progress Report, through their PMT representatives, is anticipated as soon as updated expenditure data and final comments are incorporated, approximately early next month.

# **Attachment:**

Draft October 2007 Monthly Progress Report

# **ITEM 3: PROGRESS REPORTS**

a. Draft October 2007 Monthly Progress Report



# Toll Bridge Seismic Retrofit and Regional Measure 1 Programs

Monthly Progress Report October 2007

> Draft Version 2.0



ALTRANS BAY AREA TOLL AUTHORITY CALIFORNIA TRANSPORTATION COMMISSION

Released: November 2007



# **Toll Bridge Seismic Retrofit and Regional Measure 1 Programs**

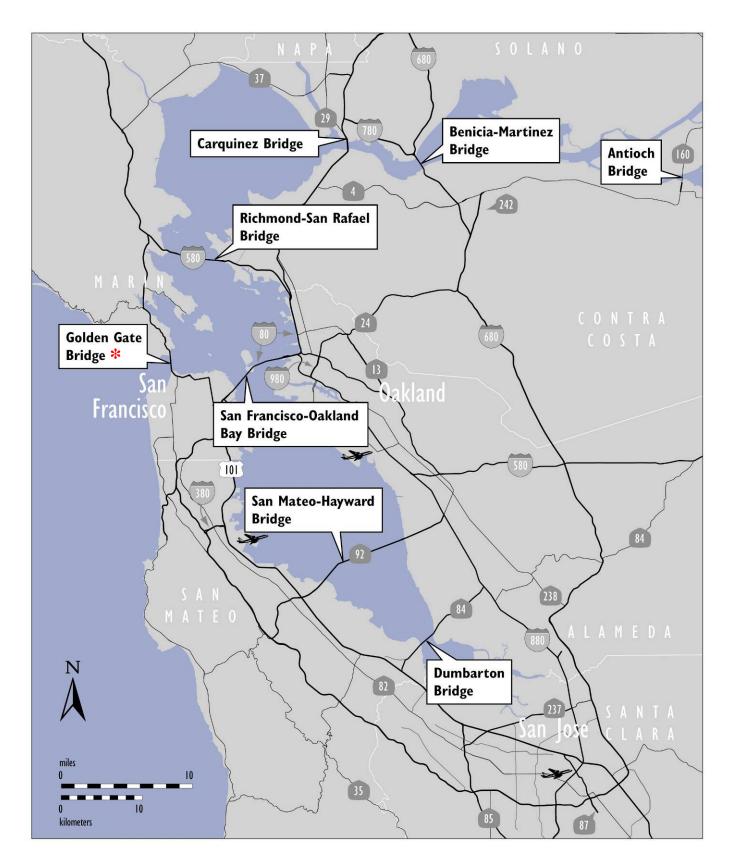
Monthly Progress Report October 2007



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# Toll Bridges of the San Francisco Bay Area



# **INTRODUCTION**

In July 2005, Assembly Bill 144, (AB 144) Hancock created the Toll Bridge Project Oversight Committee (TBPOC) to implement a project oversight and project control process for the Benicia-Martinez Bridge project and the state toll bridge seismic retrofit program projects. Comprised of the Caltrans Director, the Bay Area Toll Authority (BATA) Executive Director and the Executive Director of the California Transportation Commission (CTC), the TBPOC's project oversight and control processes include but are not limited to reviewing bid specifications and documents, providing field staff to review ongoing costs, reviewing and approving significant change orders and claims in excess of \$1 million (as defined by the committee) and preparing project reports.

AB 144 identified the Toll Bridge Seismic Retrofit Program and the new Benicia-Martinez Bridge Project as being under the direct oversight of the TBPOC. The Toll Bridge Seismic Retrofit Program includes:

Toll Bridge Seismic Retrofit Projects	Seismic Safety Status
San Francisco-Oakland Bay Bridge East Span Replacement	Construction
San Francisco-Oakland Bay Bridge West Approach Replacement	Construction
San Francisco-Oakland Bay Bridge West Span Seismic Retrofit	Complete
San Mateo-Hayward Bridge Seismic Retrofit	Complete
Richmond-San Rafael Bridge Seismic Retrofit	Complete
Eastbound Carquinez Bridge Seismic Retrofit	Complete
New Benicia-Martinez Bridge Seismic Retrofit	Complete
San Diego-Coronado Bridge Seismic Retrofit	Complete
Vincent Thomas Bridge Seismic Retrofit	Complete

The new Benicia-Martinez Bridge is part of a larger program of toll-funded projects, called the Regional Measure 1 (RM1) Toll Bridge Program, under the responsibility of the BATA. While the rest of the projects in the RM1 program are not directly under the responsibility of the TBPOC, BATA and Caltrans (CT) will continue to report on their progress as an informational item. The RM1 program includes:

RM1 Projects	Open to Traffic Status
1927 Carquinez Bridge Demolition	Construction
Interstate 880/State Route 92 Interchange Reconstruction	Construction
New Benicia-Martinez Bridge	Open
Richmond-San Rafael Bridge Deck Overlay Rehabilitation	Open
Richmond-San Rafael Bridge Trestle, Fender & Deck Joint Rehabilitation	Open
Westbound Carquinez Bridge Replacement	Open
San Mateo-Hayward Bridge Widening	Open
State Route 84 Bayfront Expressway Widening	Open
Richmond Parkway	Open

This report focuses on identifying critical project issues and monitoring project cost and schedule performance for the projects as measured against approved budgets and schedule milestones. This report is intended to fulfill Caltrans' requirement to provide monthly project progress reporting to the TBPOC under Section 30952.05 of the Streets and Highway Code.

# **EXECUTIVE SUMMARY**

# Toll Bridge Seismic Retrofit Program—Cost (\$ Millions)

Project	Work Status	AB 144 / SB 66 Budget (07/2005)	Approved Changes	Current Approved Budget (09/2007)	Cost To Date (08/2007)	Cost Forecast*	At- Completion Variance	Cost Status
a	b	С	d	e = c + d	f	g	h = g - e	i
SFOBB East Span Replacement Project								
Capital Outlay Support		959.4	-	959.4	524.7	977.1	17.7	
Capital Outlay Construction								
Skyway	Construction	1,293.0	-	1,293.0	1,180.0	1,293.0	-	•
SAS E2/T1 Foundations	Construction	313.5	-	313.5	242.7	313.5	-	•
SAS Superstructure	Construction	1,753.7	-	1,753.7	286.9	1,767.4	13.7	•
YBI Detour	Design/Const	131.9	202.5	334.4	90.5	334.4	-	•
YBI Transition Structures	Design	299.3	(23.2)	276.1	-	276.1	-	•
Oakland Touchdown (OTD)		283.8	-	283.8	11.4	302.5	18.7	
* OTD Submarine Cable	Complete	-	-	-	7.4	9.6	-	•
* OTD No. 1 (Westbound)	Construction	-	-	-	4.0	226.5	-	•
* OTD No. 2 (Eastbound)	Design	-	-	-	-	62.0	-	•
* OTD Electrical Systems	Design	-	-	-	-	4.4	-	•
Existing Bridge Demolition	Design	239.2	-	239.2	-	222.0	(17.2)	•
Stormwater Treatment Measures	Construction	15.0	3.3	18.3	13.5	18.3	-	•
East Span Completed Projects		90.3	-	90.3	89.2	90.3	-	
Right-of-Way and Environmental Mitigation		72.4	-	72.4	38.8	72.4	-	•
Other Budgeted Capital		35.1	(3.3)	31.8	0.6	7.7	(24.1)	
Total SFOBB East Span Replacement Project		5,486.6	179.2	5,665.8	2,478.3	5,674.7	8.9	
SFOBB West Approach Replacement	Construction							•
Capital Outlay Support		120.0	-	120.0	96.7	120.0	-	
Capital Outlay Construction		309.0	-	309.0	253.3	309.0	-	•
Total SFOBB West Approach Replacement		429.0	-	429.0	350.0	429.0	-	
Richmond-San Rafael Bridge Retrofit	Complete							•
Capital Outlay Support		134.0	(7.0)	127.0	126.6	127.0	-	
Capital Outlay Construction & Right-of-Way		780.0	(82.0)	698.0	666.5	698.0	-	
Total Richmond-San Rafael Bridge Retrofit		914.0	(89.0)	825.0	793.1	825.0	-	
Program Completed Projects	Complete							
Capital Outlay Support		219.8	-	219.8	219.4	219.8	-	
Capital Outlay Construction		705.6	-	705.6	698.1	705.6	-	
Total Program Completed Projects		925.4	-	925.4	917.5	925.4	-	
Miscellaneous Program Costs		30.0	-	30.0	24.7	30.0	-	
Program Contingency		900.0	(90.2)	809.8	-	800.9	(8.9)	
Total Toll Bridge Seismic Retrofit Program		8,685.0	-	8,685.0	4,563.6	8,685.0	-	

Within Approved Current Schedule and Budget

Potential Cost and Schedule Impacts: Possible future need for Program Contingency Allocation

Known Cost and Schedule Impacts: Request for Program Contingency Allocation forthcoming

\*Current contract allotment to install two submarine electrical cables is \$11.5 million. Additional non-program funding to support this allocation beyond the \$9.6 million of available program funds has been made available by the Treasure Island Development Authority.

Notes: Details may not sum to totals due to rounding effects.

Forecasts for the Monthly Reports are generally updated on a quarterly basis in conjunction with Risk Analysis assessments for the TBSRP Projects and the TBSRP Quarterly Reports.

# Toll Bridge Seismic Retrofit Program—Schedule

Project	AB 144 / SB 66 Project Complete Baseline (07/2005)	Approved Changes (Months)	Project Complete Current Approved Schedule (09/2007)	Project Complete Schedule Forecast (09/2007)	Schedule Variance (Months)	Schedule Status	Remarks
a	b	С	d = b + c	е	f = e – d	g	h
SFOBB East Span Replacement Proje Skyway	Apr 07	8	Dec 07	Dec 07	-	•	See page 10.
SAS E2/T1 Foundations	Jun 08	(3)	Mar 08	Mar 08	-	•	
SAS Superstructure	Mar 12	12	Mar 13	Mar 13	-	_ • -	See Note.
YBI Detour	Jul 07	36	Jun 10	Jun 10	-	•	See discussion on pages 18 and 19.
YBI Transition Structures	Nov 13	12	Nov 14	Nov 14	-	•	
Oakland Touchdown (OTD)	Nov 13	12	Nov 14	Nov 14	-	•	
OTD Submarine Cable	n/a		Jan 08	Jan 08	-	•	See pages 9 and 22.
OTD Westbound	n/a		Jan 10	Jan 10	-	•	
OTD Eastbound	n/a		Nov 14	Nov 14	-	•	See Note.
Existing Bridge Demolition	Sep 14	12	Sep 15	Sep 15	-	•	See Note.
Stormwater Treatment Measures	Mar 08	-	Mar 08	Mar 08	-	•	
Open to Traffic Date: Westbound	Sep 11	12	Sep 12	Sep 12	-	•	See Note.
Open to Traffic Date: Eastbound	Sep 12	12	Sep 13	Sep 13	-	•	See Note.
SFOBB West Approach Replacement	Aug 09	-	Aug 09	Aug 09	-	•	
Richmond-San Rafael Bridge							
Seismic Retrofit	Aug 05	-	Aug 05	Oct 05	2	•	Seismic retrofit completed July 29, 2005. Formal acceptance of contract October 28, 2005. \$89 million has been transferred to Program Contingency.
Public Access Project	n/a	-	May 07	Sept 07	4	•	See page 33.

Note: Schedules for selected projects and the Open to Traffic dates were extended by 12 months from the AB144/SB66 baseline schedule due to Addenda #5 and #7 on the SAS Superstructure contract.

# Regional Measure 1 Program—Cost (\$ Millions)

Project	Work Status	BATA Budget (07/2005)	Approved Changes	Current Approved Budget (09/2007)	Cost To Date (08/2007)	Cost Forecast*	At- Completion Variance	Cost Status
a	b	С	d	e = c + d	f	g	h = g - e	i
New Benicia-Martinez Bridge Project	Construction							•
Capital Outlay Support		157.1	36.5	193.6	174.4	189.1	(4.5)	
Capital Outlay Construction		861.6	176.0	1,037.6	939.8	1,037.6	-	
Capital Outlay Right-of-Way		20.4	(0.1)	20.3	12.3	20.3	-	
Project Reserve		20.8	1.7	22.5	-	27.0	4.5	
Total New Benicia-Martinez Bridge Project		1,059.9	214.1	1,274.0	1,126.5	1,274.0	-	
Carquinez Bridge Replacement Project	Construction							•
Capital Outlay Support		124.4	(0.2)	124.2	120.8	122.4	(1.8)	
Capital Outlay Construction		381.2	3.2	384.4	372.3	384.5	0.1	
Capital Outlay Right-of-Way		10.5	-	10.5	9.9	10.4	(0.1)	
Project Reserve		12.1	(3.0)	9.1	-	0.9	(8.2)	
Total Carquinez Bridge Replacement Project		528.2	-	528.2	503.0	518.2	(10.0)	
I-880/SR-92 Interchange Reconstruction	Construction							•
Capital Outlay Support		28.8	26.2	55.0	32.7	55.0	-	
Capital Outlay Construction		94.8	60.2	155.0	-	155.0	-	
Capital Outlay Right-of-Way		9.9	5.1	15.0	8.3	15.0	-	
Project Reserve		0.3	19.7	20.0	-	20.0	-	
Total I-880/SR-92 Interchange Reconstruction		133.8	111.2	245.0	41.0	245.0	-	
Program Completed Projects	Complete							
Capital Outlay Support		62.0	(5.0)	57.0	57.4	58.8	1.8	
Capital Outlay Construction		324.4	3.6	328.0	308.0	314.0	(14.0)	
Capital Outlay Right-of-Way		1.7	-	1.7	0.5	0.8	(0.9)	
Project Reserve		2.6	1.4	4.0	-	6.6	2.6	
Total Program Completed Projects		390.7	-	390.7	365.9	380.2	(10.5)	
Total Regional Measure 1 Program		2,112.6	325.3	2,437.9	2,036.4	2,417.4	(20.5)	

- Within Approved Current Schedule and Budget
- Potential Cost and Schedule Impacts: Possible future need for Program Contingency Allocation
- Known Cost and Schedule Impacts: Request for Program Contingency Allocation forthcoming

Note: Details may not sum to totals due to rounding effects.

Forecasts for the Monthly Reports are generally updated on a quarterly basis in conjunction with Risk Analysis assessments for the TBSRP Projects and the TBSRP Quarterly Reports.

# Regional Measure 1 Program—Schedule

Project	BATA Project Complete Baseline (07/2005)	Approved Changes (Months)	Project Complete Current Approved Schedule (09/2007)	Project Complete Schedule Forecast (09/2007)	Schedule Variance (Months)	Schedule Status	Remarks
a	b	С	d = b + c	е	f = e - d	g	h
New Benicia-Martinez Bridge Project  • New Benicia-Martinez Bridge	Dec 07	-	Oct 07	Oct 07	-	•	Bridge was opened on August 25, 2007.
• I-680/I-780 Interchange Replacement	Dec 07	-	Dec 07	Dec 07	-	•	
Open to Traffic Date	Dec 07	-	Aug 07	Aug 07		•	
1927 Carquinez Bridge Demolition Project	Dec 07	-	Dec 07	Dec 07	-	•	
I-880/SR-92 Interchange Reconstruction	Nov 10	-	Jun 11	Jun 11		•	Contract was awarded on August 28, 2007 with the approval of the State budget.

# **Toll Bridge Seismic Retrofit Program**

# **SFOBB East Span Seismic Replacement Project**

- On the Yerba Buena Island (YBI) Detour Contract, following the successful installation of the upper deck roadway outside the YBI tunnel over the Labor Day Weekend, Caltrans and their contractor are now focusing on completing the YBI Advanced Work and the detour viaduct to be constructed just south of the existing bridge. The first sections of viaduct steel have arrived to the Port of San Francisco.
- ♦ On the Self-Anchored Suspension Span (SAS) E2/T1 Foundation Contract, Caltrans and their contractor have completed most of the eastbound E2 foundation and column and have poured the first lift of the westbound E2 column. Work is ongoing on the westbound E2 foundation as well as the column and piles head connections at the T1 foundation.
- On the Skyway Contract, all major structural work has been completed. The last two Hinge Pipe Beams at location E were installed on the westbound structure. Ongoing punchlist work includes painting, overlay and installation of the railing and electrical work.
- On the SAS Superstructure Contract, Caltrans and their contractor are working on final trial mock-ups of the steel tower and deck sections. Civil construction work has started at the W2 foundation with falsework for the pier table. The contractor has fabricated three modules (out of nine) of the shearleg barge crane and temporary work necessary to erect and support the SAS during construction has begun.

# **SFOBB West Approach Seismic Retrofit Project**

On the San Francisco-Oakland Bay Bridge West Approach Project, Caltrans is continuing with the final major phase of the project – the reconstruction of the eastbound I-80 approach structure from 5th Street to 2nd Street. Over the next several months, future work will include foundation and superstructure work to complete the approach.

# Richmond-San Rafael Bridge Seismic Retrofit Project

♦ On Richmond-San Rafael Bridge Seismic Retrofit Project, Caltrans is concluding negotiations with regulatory agencies on pile driving issues and impacts to fisheries. A settlement is pending.

# **Regional Measure 1 Program**

# **New Benicia-Martinez Bridge Project**

• On the New Benicia-Martinez Bridge Contract, the new bridge has been opened to traffic. Caltrans and their contractors are finishing final punchlist items, including electrical work.

# I-880/SR-92 Interchange Project

On the Interstate 880/State Route 92 Interchange Contract, the contract has been awarded to a joint venture of FCI Constructors and Granite Construction. Caltrans plans to approve the contract by late September upon review of bid documents. Caltrans is working with utility companies on final electrical and telecommunication relocation.

# **New Carquinez Bridge Project**

On the 1927 Carquinez Bridge Demolition Contract, Caltrans and their contractor have completely removed the old Carquinez Bridge. With the completion in September of the westbound HOV lane from Cumming Skyways to Route 4 (under a separate Caltrans contract), Caltrans will be able to complete final roadway reconstruction and striping to open the westbound HOV lane across the Zampa Bridge to Cummings Skyway. (HOV lane striping may not take place until October or November). Other civil work on the contract includes the realignment of Wanda Street and the construction of a new bike path, change order work and final site clean up.



# **PROJECT / CONTRACT REPORTS**

# Toll Bridge Seismic Retrofit Program

San Francisco-Oakland Bay Bridge (SFOBB) East Span Replacement Project Summary

- Skyway Contract
- Self-Anchored Suspension (SAS) E2/T1 Foundations Contract
- Self-Anchored Suspension (SAS) Superstructure Contract
- Yerba Buena Island (YBI)
  - Yerba Buena Island (YBI) Detour Contract
  - Yerba Buena Island (YBI) Transition Structure Contracts
- Oakland Touchdown (OTD)
  - Oakland Touchdown (OTD) Submarine Cable Relocation Contract
  - Oakland Touchdown (OTD) #1 Contract
  - Oakland Touchdown (OTD) #2 Contract
- Other Major Contracts
- Other Contracts and Related Project Work

San Francisco-Oakland Bay Bridge (SFOBB) West Approach Replacement Project Richmond-San Rafael Bridge Seismic Retrofit Project Other Completed Seismic Retrofit Projects

# Toll Bridge Seismic Retrofit Program

# San Francisco-Oakland Bay Bridge (SFOBB) East Span Replacement Project Summary

Project Description: The East Span will be seismically retrofitted through the complete replacement of the existing span. The remaining effort for this project consists of the following contracts: Skyway—construction of two parallel concrete structures, each approximately 1.3 miles in length; Self-Anchored Suspension (SAS) Foundation—construction of SAS marine foundations; SAS Superstructure—construction of a self-anchored 385-meter main span superstructure incorporating a 160-meter fabricated structural steel tower with a main cable and inclined suspenders that will support steel orthotropic decks; Yerba Buena Island (YBI) Detour—design and construction of a temporary double-deck bypass structure that will detour traffic to the existing SFOBB while completing the westerly permanent tie-in structure of the new East Span at Yerba Buena Island; YBI Structures—construction of a new structure connecting the western end of the self-anchored suspension to the Yerba Buena Island viaduct, which will be retrofitted; Oakland Touchdown—at the Oakland end of the East Span, construction of two parallel, cast-in-place post-tensioned concrete viaducts, which join the Skyway to the at-grade Oakland approach fill; and Existing Bridge Demolition—demolition of the existing 1936 SFOBB East Span structure after the construction and placement of traffic onto the new East Span.

**SFOBB East Span Replacement Cost Summary (\$ Millions)** 

Contract	AB 144/ SB 66 Budget	Approved Changes	Current Approved Budget	Cost To Date (08/2007)	2nd Quarter 2007 Forecast	Variance
a	b	С	d = b + c	е	f	g = f - d
Capital Outlay Support	959.4	-	959.4	524.7	977.1	17.7
Capital Outlay	-	-	-	-	-	-
Skyway	1,293.0	-	1,293.0	1,180.0	1,293.0	-
SAS E2/T1 Foundations	313.5	-	313.5	242.7	313.5	-
SAS Superstructure	1,753.7	-	1,753.7	286.9	1,767.4	13.7
YBI Detour	131.9	202.5	334.4	90.5	334.4	-
YBI Transition Structures	299.3	(23.2)	276.1	-	276.1	-
Oakland Touchdown	283.8	-	283.8	11.4	302.5	18.7
♦ OTD Submarine Cable				7.4	9.6	
♦ OTD Westbound				4.0	226.5	
♦ OTD Eastbound				-	62.0	
♦ OTD Electrical Systems				-	4.4	
Existing Bridge Demolition	239.2	-	239.2	-	222.0	(17.2)
Stormwater Treatment Measures	15.0	3.3	18.3	13.5	18.3	-
East Span Completed Projects	90.3	-	90.3	89.2	90.3	-
Right-of-Way and Environmental Mitigation	72.4	-	72.4	38.8	72.4	-
Other Budgeted Capital	35.1	(3.3)	31.8	0.6	7.7	(24.1)
TOTAL	5,486.6	179.2	5,665.8	2,478.3	5,674.7	8.9

# SFOBB East Span Replacement Schedule Summary

Contract	AB 144/SB 66 Contract Completion Baseline (07/2005)	Approved Changes (Months)	Contract Complete Current Approved Schedule (09/2007)	Contract Complete Schedule Forecast (09/2007)	Schedule Variance (Months)
Skyway	April 2007	8	December 2007	December 2007	-
YBI Detour*	July 2007	36	June 2010	June 2010	-
Stormwater Treatment Measures	March 2008	-	March 2008	March 2008	-
SAS E2/T1 Foundations	June 2008	(3)	March 2008	March 2008	-
Open to Traffic: Westbound	September 2011	12	September 2012	September 2012	-
SAS Superstructure	March 2012	12	March 2013	March 2013	-
Open to Traffic: Eastbound	September 2012	12	September 2013	September 2013	-
Oakland Touchdown (OTD)	November 2013	12	December 2014	December 2014	-
* OTD Submarine Cable	n/a		January 2008	January 2008	-
* OTD No. 1 (Westbound)	n/a		January 2010	January 2010	-
* OTD No. 2 (Eastbound)	n/a		November 2014	November 2014	-
YBI Transition Structure*	November 2013	12	November 2014	November 2014	-
Existing Bridge Demolition*	September 2014	12	September 2015	September 2015	-

<sup>\*</sup>Contract schedules being further assessed due to changes in SAS schedule.

**Project Status:** Construction is currently ongoing for the Skyway, YBI Detour, SAS E2/T1 Foundations, Stormwater Treatment Measures, OTD #1 (Westbound) and the OTD Submarine Cable contracts. Contracts in design include the OTD #2 (eastbound), the YBI Transition Structure (YBITS) Contract #1, YBITS Contract #2 and the Existing Bridge Demolition contract. Design of each contract is proceeding per its schedule requirements. The OTD #1 project start date was August 22, 2007. SAS Superstructure construction is ongoing.

**Project Issues:** All projects except Demolition have a Risk Response Team and a Risk Register incorporating quantitative risk analyses. A preliminary risk register has also been developed for Capital Outlay Support (COS) costs, as well as a program-level risk register that captures risks common to all project. The development of a quantitative COS risk analysis is in progress. The Risk Response Teams have focused attention on developing and executing risk response actions for their most significant risks. Many of the actions have been effective, as evidenced by a reduction of risk impacts on the Skyway and E2/T1 contracts from the previous quarter. The effort to develop and execute risk response actions to mitigate the cost and schedule impacts posed by risk issues continues to be a high priority.

**Recent TBPOC Actions:** See the following contract detail pages for specific TBPOC actions on East Span contracts.

### San Francisco-Oakland Bay Bridge (SFOBB) East Span Replacement Project

### **SKYWAY CONTRACT**

Contract Description: The Skyway contract constructs two parallel pre-cast concrete approach spans from Oakland to the self-anchored suspension span near Yerba Buena Island.

**Skyway Cost Summary (\$ Millions)** 

Contract a	AB 144 / SB 66 Budget (07/2005) b	Approved Changes c	Current Approved Budget (09/2007) d = b + c	Cost To Date (08/2007) e	Cost Forecast (09/2007) f	Variance g = f - d
East Span - Skyway						
Capital Outlay Support	197.0	-	197.0	169.0	197.0	-
Capital Outlay Construction	1,293.0	-	1,293.0	1,180.0	1,293.0	-
TOTAL	1,490.0	-	1,490.0	1,349.0	1,490.0	-

Note: Details may not sum to totals due to rounding effects.

**Skyway Schedule Summary** 

Contract	AB 144/SB 66 Contract Completion Baseline (07/2005)	Approved Changes (Months)	Contract Complete Current Approved Schedule (09/2007)	Contract Complete Schedule Forecast (09/2007)	Schedule Variance (Months)
East Span - Skyway	April 2007	8	December 2007	December 2007	-

Contract Status: The Skyway contract is currently in construction and is 98% complete as of September 20, 2007. The eastbound and westbound structures are 100% complete with the erection of all segments. The eastbound polyester overlay has been completed. The deck grinding on the westbound is in progress. Other remaining work includes service platforms, electrical work, painting, and other punchlist work. The contractor installed the last two Hinge Pipe Beams at location E on the westbound structure of the Skyway. Other remaining work includes service platforms, electrical work, painting, two hinge pipe beams, and other punchlist work.

#### **Contract Issues:**

Issue	Mitigating Action
KFM issued 15 NOPC's on behalf of USI for welding issues related to the fabrication of the Steel Orthotropic Box Girders (SOBG).	USI completed the fabrication of the SOBG. All NOPC's filed were heard by the Dispute Review Board. Caltrans is evaluating USI's cost claims.

Recent TBPOC Actions: TBPOC approved CCO 104 S1 "Steel Painting" at the August, 2007 meeting.

# **Contract Photographs**



Skyway - Overlay Operation



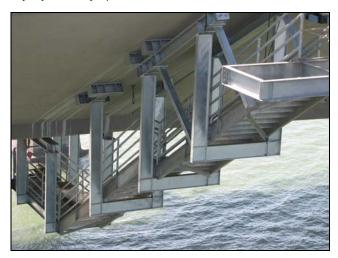
Skyway - Painting Bike Path



Skyway - White Painted OBG - Eastbound



Skyway - Overlay Operation 2



Skyway - Stairs Leading to the Substation



Skyway - Installing Hinge Pipe Beam E - Eastbound (1)

# San Francisco-Oakland Bay Bridge (SFOBB) East Span Replacement Project

### ▶ Self-Anchored Suspension (SAS) E2/T1 Foundations Contract

Contract Description: The Self-Anchored Suspension (SAS) E2/T1 Foundations contract constructs the main tower foundation at T1 and the adjacent east foundation at E2. (See diagram pg. 14)

**SAS E2/T1 Foundations Cost Summary (\$ Millions)** 

<u>Contract</u>	AB 144 / SB 66 Budget (07/2005) b	Approved Changes c	Current Approved Budget (09/2007) d = b + c	Cost To Date (08/2007)	Cost Forecast (09/2007) f	Variance g = f - d
East Span - SAS E2 / T1 Foundations						
Capital Outlay Support	52.5	(11.0)	41.5	23.4	41.5	-
Capital Outlay Construction	313.5	-	313.5	242.7	313.5	-
TOTAL	366.0	(11.0)	355.0	266.1	355.0	-

Note: Details may not sum to totals due to rounding effects.

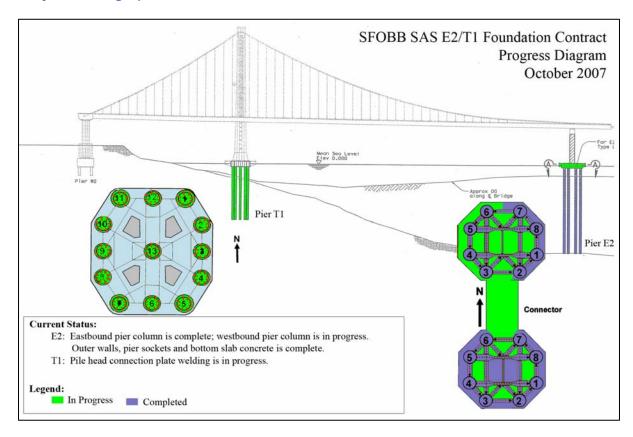
SAS E2/T1 Foundations Schedule Summary

	AB 144/SB 66		Contract Complete Current	Contract	
Contract	Contract Completion Baseline (07/2005)	Approved Changes (Months)	Approved Schedule (09/2007)	Complete Schedule Forecast (09/2007)	Schedule Variance (Months)
East Span - SAS E2 / T1 Foundations	June 2008	(3)	March 2008	March 2008	-

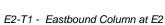
**Contract Status:** The contract is 89% complete as of September 20, 2007. On the SAS Marine Foundations Contract, all 13 rock sockets that tie the SAS tower foundation (T1) to bedrock have been installed. The T1 bottom slab concrete has been placed. Slot cutting and T1 pile head connection welding is in progress. At the E2 Foundation, all piles are complete. Caltrans and their contractor have completed most of the eastbound E2 foundation and column. The first lift of the column at westbound E2 has been poured. Rebar cage assembly is in progress for the second lift of the E2W column.

Issue	Mitigating Action
The Contractor may potentially claim additional compensation for extra work for producing integrated shop drawings and changes from that process.	The Department is evaluating the issues and may forward the disputes to the DRB for resolution. Pending their findings, the Department may settle this dispute

# **Project Photographs**









OTD1 - Construction of the Trestle

### San Francisco-Oakland Bay Bridge (SFOBB) East Span Replacement Project

### ► Self-Anchored Suspension (SAS) Superstructure Contract

Contract Description: The Self-Anchored Suspension (SAS) Superstructure contract constructs a signature tower span between the Skyway and the Yerba Buena Island transition structure. Work on the SAS bridge has been split between three contracts—the SAS Superstructure (under construction), the SAS E2/T1 Foundation (under construction), and the SAS W2 Foundation (completed).

SAS Superstructure Cost Summary (\$ Millions)

Contract a	AB 144 / SB 66 Budget (07/2005) b	Approved Changes c	Current Approved Budget (09/2007) d = b + c	Cost To Date (08/2007) e	Cost Forecast (09/2007) f	Variance g = f - d
East Span - SAS Superstructure						
Capital Outlay Support	214.6	-	214.6	47.0	214.6	-
Capital Outlay Construction	1,753.7	-	1,753.7	286.9	1,767.4	13.7
TOTAL	1,968.3	-	1,968.3	333.9	1,982.0	13.7

Note: Details may not sum to totals due to rounding effects.

**SAS Superstructure Schedule Summary** 

Contract	AB 144/SB 66 Contract Completion Baseline (07/2005)	Approved Changes (Months)	Contract Complete Current Approved Schedule (09/2007)	Contract Complete Schedule Forecast (09/2007)	Schedule Variance (Months)
East Span - SAS Superstructure	March 2012	12	March 2013	March 2013	-

Contract Status: The contract is 21% complete as of September 20, 2007. The contractor, American Bridge Fluor Enterprises, Inc., a Joint Venture (ABF), and their subcontractors continue to prepare and submit requests for information and submittals for Caltrans review and response, including schedule updates. The schedule update for August 2007 was submitted and accepted. ABF has completed the design of the crane barge to be used to lift the heavy tower and deck sections. Three modules of the barge have been fabricated in Oregon. Civil construction work has started at the W2 foundation with falsework for the pier table. The fabricators for the temporary towers and trusses have been selected by the contractor and fabrication is underway.

Caltrans and their contractor are working on final trial mock-ups of the steel tower and deck sections. Two of the three tower mock-ups will be completed in November, 2007. Construction of the mass concrete thermal control mock-up pour has been successfully completed. The Hinge "K" Pipe Beam fabrication is in progress. In addition, the high strength pre-stressing rods for the Hinge "K" Pipe Beam have been manufactured and delivered. Casting of the W2 saddle has started in Japan. A B4 Cable Band, which will be used for the friction test, was cast in the United Kingdom. The wire for the cable friction test has been manufactured and fabrication of the strands has started. The cable band friction test will be conducted at Pier 7.

Zhenhua Port Machinery Company (ZPMC) of Shanghai, China continues to set up their facilities to fabricate the steel tower and deck sections. ZPMC is preparing initial test mock-ups of the sections. Fabrication of the steel deck sections and the shearleg cranes has started. The forecasted \$13.7 million increase in construction costs on the SAS contract from the approved budget reflects actions taken to encourage additional bidders on the contract.

### **Contract Issues:**

Issue	Mitigating Action
Caltrans has identified the need for added resources to monitor work at the ZPMC steel fabrication facilities in China.	Caltrans and BATA are working together to set up facilities and to organize resources that will ensure an effective Owner's presence in the steel fabrication shops.
Potential for cost increases during construction due to steel plate conflicts. Applies to structural steel, including the towers and box girders.	Establish Working Drawing Campus with Contractor to facilitate discussion about conflicts and meet regularly. Caltrans has constructed models and identified conflicts, for which CCOs are to be prepared.

**Recent TBPOC Actions:** None

# **Contract Photographs**



SAS - W2 Bent Cap



SAS - Mass Concrete Mock-up with Cooling System

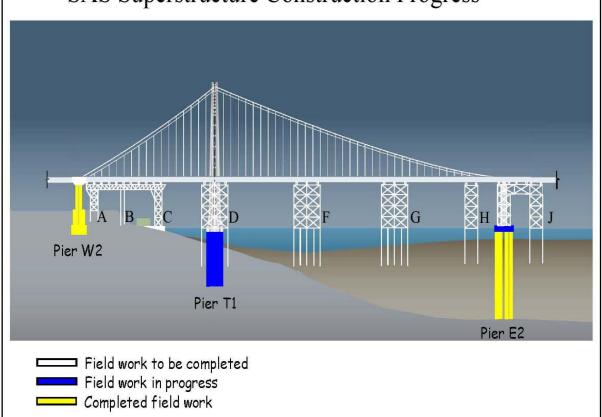


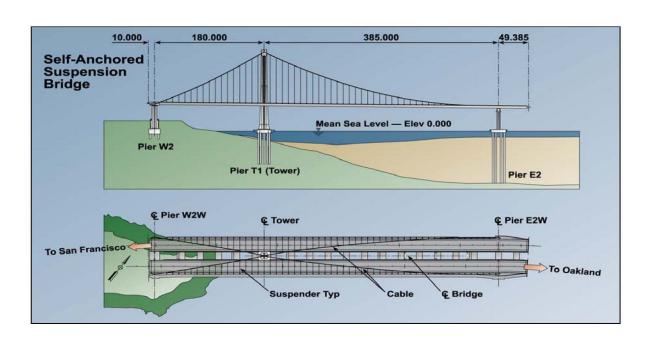
SAS - Top of W2R Column Reinforcement



SAS - W2 Bent Cap Forms

# SAS Superstructure Construction Progress





# San Francisco-Oakland Bay Bridge (SFOBB) East Span Replacement Project

# ► YERBA BUENA ISLAND (YBI)

#### • YBI DETOUR CONTRACT

**Contract Description:** The YBI Detour constructs a temporary detour from the YBI tunnel to the existing east span of the Bay Bridge. This detour maintains traffic on the existing bridge while the YBI Transition Structure Contract completes the tie-in from the SAS to the existing tunnel.

**YBI Detour Cost Summary (\$ Millions)** 

Contract a	AB 144 / SB 66 Budget (07/2005) b	Approved Changes c	Current Approved Budget (09/2007) d = b + c	Cost To Date (08/2007) e	Cost Forecast (09/2007) f	Variance g = f - d
YBI Detour						
Capital Outlay Support	29.5	10.0	39.5	27.4	39.5	-
Capital Outlay Construction	131.9	202.5	334.4	90.5	334.4	-
TOTAL	161.4	212.5	373.9	117.9	373.9	-

Note: Details may not sum to totals due to rounding effects.

#### **YBI Detour Schedule Summary**

Contract	AB 144/SB 66 Contract Completion Baseline (07/2005)	Approved Changes (Months)	Contract Complete Current Approved Schedule (09/2007)	Contract Complete Schedule Forecast (09/2007)	Schedule Variance (Months)
YBI Detour *	July 2007	36	Jun 2010	June 2010	-

<sup>\*</sup> Contract schedule under assessment. See Contract Issues on the following page.

**Contract Status:** The YBI Detour Contract was awarded in early 2004 to construct a temporary detour structure providing for, at that time, a new bridge opening in 2006. Due to the re-advertisement of the SAS superstructure contract in 2005, the bridge opening was rescheduled to 2013, which necessitated a temporary suspension of the YBI Detour contract and design changes. The required suspension of work and design revisions has resulted in increased cost for the YBI Detour contract.

In 2006, the TBPOC approved a plan to pace work on the project, to have Caltrans assume design responsibility over the east and west tie-ins, and to make changes to the detour structures to allow it to stand in place alone for a longer duration than originally intended. The YBI Detour contract is now forecast to be completed in 2010 consistent with the planned westbound opening date of 2012 for the new bridge.

In addition to the revised contract completion date, the TBPOC approved on February 15, 2007 to advance foundation and retrofit work from the Yerba Buena Island Transition Structures (YBITS) contract to the YBI Detour contract. Advancing the work will reduce overall project schedule risk by taking work off the critical path for the East Span project while making more effective use of the extended YBI Detour contract duration, and will enable potential acceleration of the SAS construction pending negotiation with American Bridge.

Advancing the transition structure work, completing the tie-in work under Caltrans' design, and pacing of the remaining YBI Detour work will result in an estimated \$180 million net increase in the project costs from the approved budget. The increase will be covered by the existing program contingency and will not increase the AB144 program budget.

Prior to the suspension, foundations for the temporary detour were nearly completed. Fabrication of the temporary viaduct in Korea is progressing. The design of the Viaduct has been completed. Steel fabrication of the Viaduct continues at Dongkuk S&C in Pohang, Korea. The first shipment of the Viaduct has arrived at the Port of San Francisco. Rebar fabrication for bent 50 is in progress and the fabricator for the ETI has been selected by the contractor.

Caltrans and their contractor successfully rolled into place the precast replacement upper roadway deck section near the YBI tunnel as part of the West Tie-in Phase I. The work was completed 11 hours early during the full Bay Bridge closure over the Labor Day Weekend. Traffic impacts during the bridge closure were manageable and work is now continuing to demobilize the roll-in operation and to complete the detour viaduct. Caltrans and their contractor are now focusing on completing the detour viaduct to be constructed just south of the existing bridge. In addition, as part of the YBI Advanced work, work is continuing on the foundation of W4 L&R and W6 L&R.

**Recent TBPOC Actions:** In June 2007, the TBPOC approved implementation of the Department's plan of action to complete the YBI Detour.

#### **Contract Issues:**

Issue	Mitigating Action
Caltrans will need to negotiate a number of contract change orders to implement the aforementioned changes to the contract, including the Labor Day Deck Roll-in, the advancement of YBI Transition Structure Work, design enhancements to the detour structure, and other work.	The Department has requested TBPOC approval of a plan of action to implement the changes.

### **Contract Photographs**



YBID - Bent Cap Falsework for the Viaduct



YBID - Excavation for the Footing at W6



Early Stages of Demolition 7am 9/1/07



Lifting of Two Girders 2pm 9/1/07



Lifting a North Edge Girder 5:30pm 9/2/07



Seven Girders Removed 11am 9/01/07



Loading Demolished Girder on the Truck 3pm 9/1/07



Demolition of the Last Column 8pm 9/2/07



Skid Tracks Laid for the Roll-in 1 12:30am 9/3/07



Rolling the New Structure Looking North 1:30am 9/3/07



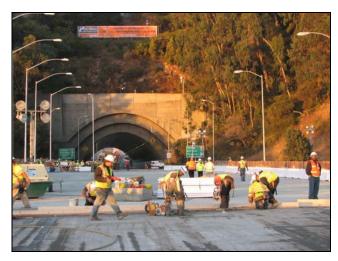
Demo of the Skid Beam on the Ramp 9/3/07 Early Morning



Rolling the New Structure 1:15am 9/3/07



Demo of Beam Skid Track on the Ramp at Dawn 9/3/07



Closure Pour on the East Side 9/3/07 Early Morning

# San Francisco-Oakland Bay Bridge (SFOBB) East Span Replacement Project

### ► YERBA BUENA ISLAND (YBI)

#### YBI TRANSITION STRUCTURE CONTRACTS

Contract Description: The YBI Transition Structure contracts will construct the mainline YBI transition structures (YBITS) that will connect the SAS portion of the new bridge to the newly rolled in WTI Phase I structure. YBITS #1 will construct the mainline approach structure from the new bridge to the WTI Phase I structure. YBITS #2 will demolish the YBI Detour temporary structure, complete the new eastbound on-ramp, reconstruct local affected facilities at YBI, and complete the bike path from the SAS to YBI (except for a section of the path that conflicts with existing column E1). That section of the path is contemplated to be completed in the demolition contract. A YBI Landscaping Contract will restore slopes and vegetation in areas affected by YBI construction.

### **YBI Transition Structure Cost Summary (\$ Millions)**

Contract a	AB 144 / SB 66 Budget (07/2005) b	Approved Changes c	Current Approved Budget (09/2007) d = b + c	Cost To Date (08/2007) e	Cost Forecast (09/2007) f	Variance g = f - d
YBI Transition Structure						
Capital Outlay Support	78.7	-	78.7	15.4	78.7	-
Capital Outlay Construction	299.3	(23.2)	276.1	-	276.1	-
TOTAL	378.0	(23.2)	354.8	15.4	354.8	-

Note: Details may not sum to totals due to rounding effects.

#### **YBI Transition Structure Schedule Summary**

Contract	AB 144/SB 66 Contract Completion Baseline (07/2005)	Approved Changes (Months)	Contract Complete Current Approved Schedule (09/2007)	Contract Complete Schedule Forecast (09/2007)	Schedule Variance (Months)
YBI Transition Structure	November 2013	12	November 2014	November 2014	-

**Contract Status:** In February 2007, the TBPOC approved a plan to accelerate portions of the YBITS work by adding it to the YBI Detour Contract. The new forecast for the YBITS contract excluding the advance work is \$276.1 million which is a net reduction of \$23.2 million from the AB 144/SB 66 budget. Caltrans is preparing the remaining portion of the YBITS contract for advertisement in 2008. See the YBI Detour Contract Status on page 18 for more information.

Contract Issues: None.

**Recent TBPOC Actions**: In February 2007, the TBPOC approved a plan to accelerate YBITS work on the YBI Detour contract.

### San Francisco-Oakland Bay Bridge (SFOBB) East Span Replacement Project

#### **▶ OAKLAND TOUCHDOWN**

#### • OAKLAND TOUCHDOWN SUBMARINE CABLE RELOCATION CONTRACT

**Contract Description:** The OTD Submarine Cable Contract will replace the existing submarine electrical cable from Oakland to Treasure Island, and will be completed ahead of OTD Contract No. 1 to avoid possible construction conflicts.

### Oakland Touchdown Submarine Cable Relocation Cost Summary (\$ Millions)

<u>Contract</u> a	AB 144 / SB 66 Budget (07/2005) b	Approved Changes c	Current Approved Budget (09/2007) d = b + c	Cost To Date (08/2007)	Cost Forecast (09/2007) f	Variance g = f - d
OTD Submarine Cable						
Capital Outlay Support	-	-	-	0.7	3.0	-
Capital Outlay Construction	-	-	-	7.4	9.6	-
TOTAL	-	-	-	8.1	12.6	-

Note: Details may not sum to totals due to rounding effects. The allocation of AB144/SB 66 budgets is proceeding. Budget amount is TBD. Overall OTD budgets and forecasts are shown on page 2.

# **Oakland Touchdown Submarine Cable Relocation Schedule Summary**

	AB 144/SB 66 Contract Completion Baseline	Approved Changes	Contract Complete Current Approved Schedule	Contract Complete Schedule Forecast	Schedule Variance
Contract	(07/2005)	(Months)	(09/2007)	(09/2007)	(Months)
OTD Submarine Cable	-	-	January 2008	January 2008	-

#### **Contract Status:**

Current contract allotment to install two submarine electrical cables is \$11.5 million. Additional non-program funding to support this allocation beyond the \$9.6 million of available programs funds has been made available by the Treasure Island Development Authority. All field work has been completed and the contractor has demobilized. Contract closeout is in progress.

**Contract Issues:** There is one outstanding NOPC that was filed by the contractor in relation to "Excess Debris" while laying the cables.



Lowering of the Jet Plow



Lowering of Cable #1

### San Francisco-Oakland Bay Bridge (SFOBB) East Span Replacement Project

#### **▶ OAKLAND TOUCHDOWN**

#### OAKLAND TOUCHDOWN #1 CONTRACT

Contract Description: The Oakland Touchdown #1 Contract includes construction of all marine foundations, and land foundations (except for the eastbound abutment), westbound bridge section, and one frame of the eastbound bridge section and roadway approach for the section connecting the new Skyway portion to the roadway west of the Oakland Toll Plaza. This contract also constructs the electrical substation and the eastbound detour roadway. Traffic will not be placed on the detour until later during OTD #2.

# To be Updated

Oakland Touchdown #1 Cost Summary (\$ Millions)

Contract a	AB 144 / SB 66 Budget (07/2005) b	Approved Changes c	Current Approved Budget (09/2007) d = b + c	Cost To Date (08/2007) e	Cost Forecast (09/2007) f	Variance g = f - d
Oakland Touchdown #1						
Capital Outlay Support	-	-	-	4.9	49.9	-
Capital Outlay Construction	-	-	-	4.0	226.5	-
TOTAL	-	-	-	9.0	276.4	-

Note: Details may not sum to totals due to rounding effects. The allocation of AB144/SB 66 budgets is proceeding. Budget amount is TBD. Overall OTD budgets and forecasts are shown on page 2.

Oakland Touchdown #1 Schedule Summary

Contract	AB 144/SB 66 Contract Completion Baseline (07/2005)	Approved Changes (Months)	Contract Complete Current Approved Schedule (09/2007)	Contract Complete Schedule Forecast (09/2007)	Schedule Variance (Months)
Oakland Touchdown #1	-	-	Jan 2010	Nov 2009	-

Contract Status: The contract was awarded to MCM construction on July 17, 2007. The first working day of the contract was August 22, 2007. Based on an A & B contract requirement, with a 650 plus 160, or 810 days contract duration, the contract completion date is November 8, 2009. The interim 120-day schedule was submitted on August 23, 2007 and a response letter containing the Department's review comments was issued to the Contractor on September 4, 2007. The baseline CPM schedule was submitted electronically on Friday, September 7, 2007 and is currently being reviewed by Caltrans for conformance to specifications. The Department continued to review and process various Contractors' submittals, including the SWPPP, which has been conditionally approved by the Regional Quality Control Board (RQCB). This conditional approval has authorized the Contractor to start their field work operations. The Contractor has already driven some test piles and has delivered soldier and sheet piles to the jobsite. The trestle design has been approved and pile driving work has started for the trestle construction.

Contract Issues: None.

# San Francisco-Oakland Bay Bridge (SFOBB) East Span Replacement Project

#### **▶ OAKLAND TOUCHDOWN**

#### • OTHER OAKLAND TOUCHDOWN CONTRACTS

**Contract Description:** The Oakland Touchdown #2 Contract includes construction of the remaining eastbound bridge section and roadway approach for the section connecting the new Skyway portion to the roadway west of the Oakland Toll Plaza. This work would occur once the westbound traffic is shifted onto the new SAS.

### To be Updated

Oakland Touchdown #2 Cost Summary (\$ Millions)

Contract	AB 144 / SB 66 Budget (07/2005)	Approved Changes	Current Approved Budget (09/2007)	Cost To Date (08/2007)	Cost Forecast (09/2007)	Variance
а	b	С	d = b + c	е	f	g = f - d
Capital Outlay Support	-	-	-	0.4	17.2	-
Capital Outlay Construction						
Oakland Touchdown #2	-	-	-	-	62.0	-
Oakland Touchdown Electrical Systems	-	-	-	-	4.4	-
TOTAL	-	-	-	0.4	83.6	-

Note: Details may not sum to totals due to rounding effects. The allocation of AB144/SB 66 budgets is proceeding. Budget amount is TBD. Overall OTD budgets and forecasts are shown on page 2.

Oakland Touchdown #2 Schedule Summary

odklana rodondown	AB 144/SB 66	arminar y	Contract	Contract	
Contract	Contract Completion Baseline (07/2005)	Approved Changes (Months)	Complete Current Approved Schedule (09/2007)	Complete Schedule Forecast (09/2007)	Schedule Variance (Months)
Oakland Touchdown #2	-	-	November 2014	November 2014	-

**Contract Status:** Design work for the structures portion of OTD Contract No. 2 is substantially complete. The contract will be advertised in 2010 so that construction can be completed in time for opening the SAS in the eastbound direction. Determination of contract scope for the Oakland Touchdown Electrical Systems is underway. Caltrans is also considering the option of incorporating this work into the Oakland Touchdown #2 contract.

Contract Issues: None.

# San Francisco-Oakland Bay Bridge (SFOBB) East Span Replacement Project

#### **▶ OTHER MAJOR CONTRACTS**

Contract Description: Other Major Contracts include the Stormwater Treatment Measures contract, which will implement best practices for storm water runoff treatment at the SFOBB toll plaza and the Existing Bridge Demolition contract, which will include the complete removal of the existing 1936 east span following the opening of the new bridge.

Other Major Contracts Cost Summary (\$ Millions)

Contract	AB 144 / SB 66 Budget (07/2005)	Approved Changes	Current Approved Budget (09/2007)	Cost To Date (08/2007)	Cost Forecast (09/2007)	Variance
a	b	С	d = b + c	е	f	g = f - d
Capital Outlay Support	85.7	2.0	87.7	7.5	87.7	-
Capital Outlay Construction						-
Existing Bridge Demolition	239.2	-	239.2	-	222.0	(17.2)
Stormwater Treatment Measures	15.0	3.3	18.3	13.5	18.3	-
Total Capital Outlay Construction	254.2	3.3	257.5	13.5	240.3	(17.2)
TOTAL	339.9	5.3	345.2	21.0	328.0	(17.2)

Note: Details may not sum to totals due to rounding effects.

**Other Major Contracts Schedule Summary** 

Contract	AB 144/SB 66 Contract Completion Baseline (07/2005)	Approved Changes (Months)	Contract Complete Current Approved Schedule (09/2007)	Contract Complete Schedule Forecast (09/2007)	Schedule Variance (Months)	% Design Comp.
Existing Bridge Demolition	September 2014	12	September 2015	September 2015	-	10
Stormwater Treatment Measures	March 2008	-	March 2008	March 2008	-	N/A

### **Contract Status:**

Stormwater Treatment Measures: The contract is 86% complete as of August 20, 2007. Current work includes installation of drainage systems, irrigation lines, metal beam guardrails, pump station electrical work, restoring highway lighting and construction of the Bioretention basins.

Bridge Demolition: Design work has been temporarily suspended to assign engineering resources to higher priority tasks, and will resume at a later time. The contract schedule completion date has been extended by 12 months due to a 12-month SAS contract extension. The \$17.2 million decrease in construction costs for the Existing Bridge Demolition contract is due to a re-evaluation of cost escalation rates for the contract.

Issue	Mitigating Action
The Contractor has encountered problems with unsuitable materials and the need to upgrade electrical equipment to meet the pumping requirements of the contract.	The Department has sought supplemental contract funds to cover additional project risks, including the delays from the Maze Collapse, the unsuitable materials, and the upgrade of the electrical systems.

**Recent TBPOC Actions:** In June 2007, the TBPOC approved a supplemental fund request by the Department to increase the contract budget to \$18.3 million from available "Other Budgeted Capital" funds.



A7 Line - AC Paving

Area 5 – Forebay Detention Basin



Area 5, Substation 6, - Tesco Control Systems

### San Francisco-Oakland Bay Bridge (SFOBB) East Span Replacement Project

# **▶ OTHER COMPLETED CONTRACTS AND RELATED WORK**

Summary Description: Substantial work has already been performed on the SFOBB East Span Replacement project to facilitate construction of the mainline construction contracts.

Other Contracts and Related Work Cost Summary (\$ Millions)

Contract	AB 144 / SB 66 Budget (07/2005)	Approved Changes	Current Approved Budget (09/2007)	Cost To Date (08/2007)	Cost Forecast (09/2007)	Variance
a	b	С	d = b + c	е	f	g = f - d
Capital Outlay Support	227.0	(1.0)	226.0	209.0	226.0	-
Right-of-Way and Environmental Mitigation	72.4	-	72.4	38.8	72.4	-
Capital Outlay Construction						-
SAS W2 Foundations	26.4	-	26.4	25.8	26.4	-
YBI/SAS Archaeology	1.1	-	1.1	1.1	1.1	-
YBI - USCG Road Relocation	3.0	-	3.0	2.8	3.0	-
YBI - Substation and Viaduct	11.6	-	11.6	11.3	11.6	-
Oakland Geofill	8.2	-	8.2	8.2	8.2	-
Pile Installation Demonstration Project	9.2	-	9.2	9.2	9.2	-
Existing East Span Retrofit	30.8	-	30.8	30.8	30.8	-
Total Capital Outlay Construction Completed	90.3	-	90.3	89.2	90.3	-
TOTAL	389.7	(1.0)	388.7	337.0	388.7	-

Note: Details may not sum to totals due to rounding effects.

Other Contracts and Related Work Schedule Summary

- and - contracted and reconstruction control and cont						
Project	Actual Project Completion Date					
Existing East Span Retrofit	March 1998					
Interim Retrofit	July 2000					
Pile Installation Demolition Project	December 2000					
YBI / SAS Archaeology	January 2003					
Oakland Geofill	April 2003					
YBI – USCG Road Relocation	June 2004					
SAS W2 Foundations	October 2004					
YBI Substation and Viaduct	May 2005					

Summary Status: Construction has been completed on the above-listed contracts. Caltrans continues to work with various environmental agencies to conduct compliance inspections and monitor and mitigate any environmental impacts from the project.

Contract Issues: None.

### San Francisco-Oakland Bay Bridge (SFOBB) West Approach Replacement Project

**Project Description:** The SFOBB West Approach Replacement Project will replace the entire west approach structure from 5<sup>th</sup> Street to the west anchorage of the existing west spans of the SFOBB while maintaining existing traffic lanes for the weekday commute.

**SFOBB West Approach Replacement Cost Summary (\$ Millions)** 

Project a	AB 144 / SB 66 Budget (07/2005) b	Approved Changes C	Current Approved Budget (09/2007) d = b + c	Cost To Date (08/2007) e	Cost Forecast (09/2007)	Variance g = f - d
West Approach						
Capital Outlay Support	120.0	-	120.0	96.7	120.0	-
Capital Outlay Construction	309.0	-	309.0	253.3	309.0	-
TOTAL	429.0	-	429.0	350.0	429.0	-

Note: Details may not sum to totals due to rounding effects.

**SFOBB West Approach Replacement Schedule Summary** 

Project	AB 144/SB 66 Project Completion Baseline (07/2006)	Approved Changes (Months)	Project Complete Current Approved Schedule (09/2007)	Contract Complete Schedule Forecast (09/2007)	Schedule Variance (Months)
West Approach	August 2009	-	August 2009	August 2009	-

**Project Status:** Construction is 83% complete as of August 20, 2007. Seismic retrofit construction is continuing throughout the project. The rebuilding of the new EB 80 structure is in progress with column installation that will continue throughout the summer with falsework installation to follow. An extensive public outreach effort continues and will be necessary until the spring of 2008 for the construction of the EB 80 structure adjacent to the Stillman Street area. Frame 7U temporary supports and falsework will continue and soffit pours are anticipated in mid September 2007. Frame 6U falsework has commenced during this report period. Materials are being procured and fabricated for the Frame 8L isolation casing.

#### Project Issues:

Project issues.	
Issue	Mitigating Action
Modification of the isolation casings for Frame 8L is being redesigned to address constructability issues with the jacking platform.	The Department is proceeding with the procurement and fabrication of materials for the isolation casings of Frame 8L in order to mitigate any impact to the project schedule.

Contract Issues: None.



West Approach



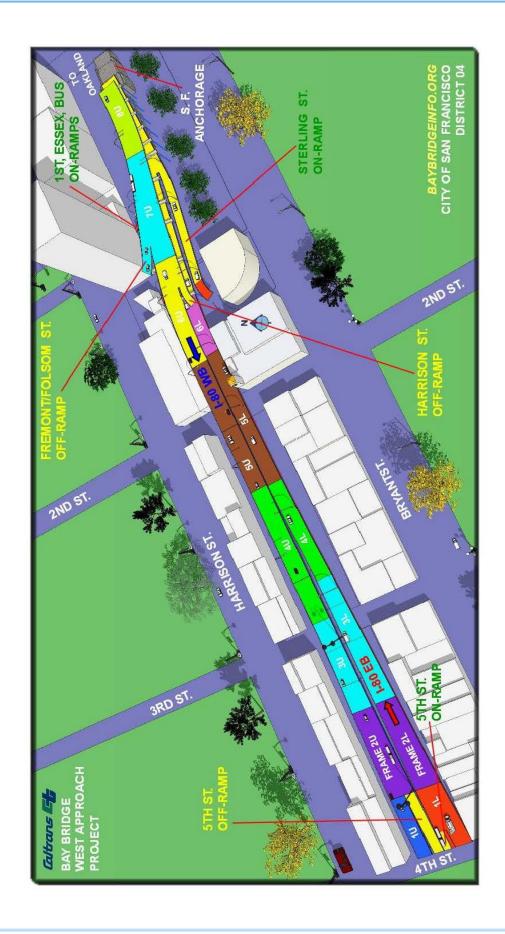
West Approach



West Approach – I-80 Westbound



West Approach Interim I-80 Eastbound



### Richmond-San Rafael Bridge (RSRB) Seismic Retrofit Project

**Project Description:** The Richmond-San Rafael (RSR) Bridge Seismic Retrofit Project strengthened the existing bridge to withstand the effects of a large seismic event. As part of the retrofit work, Caltrans performed work to strengthen the bridge foundations, replace the existing west trestle and the main channel fenders and complete the joint rehabilitation of the bridge deck. (The RM1 work is reported in the RM1 section of the report.)

### **RSRB Seismic Retrofit Cost Summary (\$ Millions)**

Project a	AB 144 / SB 66 Budget (07/2005) b	Approved Changes c	Current Approved Budget (09/2007) d = b + c	Cost To Date (08/2007)	Cost Forecast (09/2007)	Variance g = f - d
RSRB Seismic Retrofit						
Capital Outlay Support	134.0	(7.0)	127.0	126.6	127.0	-
Capital Outlay Construction & Right-of-Way	780.0	(82.0)	698.0	666.5	698.0	-
TOTAL	914.0	(89.0)	825.0	793.1	825.0	-

Note: Details may not sum to totals due to rounding effects.

#### **RSRB Seismic Retrofit Schedule Summary**

Project	AB 144/SB 66 Project Completion Baseline (07/2005)	Approved Changes (Months)	Project Complete Current Approved Schedule (09/2007)	Contract Complete Schedule Forecast (09/2007)	Schedule Variance (Months)
RSRB Seismic Retrofit	August 2005	-	August 2005	October 2005	2
RSRB Public Access Lot	NA	-	September 2007	August 2007	-1

**Project Status:** The retrofit construction contract was completed and accepted on October 28, 2005. Project savings in the amount of \$89 million was transferred to the program contingency in October 2006.

Caltrans is concluding negotiations with regulatory agencies on pile driving issues and impacts to fisheries. A settlement is pending.

Construction work on the Public Access Project was completed in August 2007 and the lot was opened to public use.

<sup>\*</sup> The seismic retrofit contract included work to rehabilitate the bridge deck joints. Although the deck joint work was funded from RM1 toll funds, the work is also eligible for Toll Bridge Seismic Retrofit Program funding. In July 2005, BATA rescinded \$16.9 million in RM1 funds for the deck joint work to make additional RM1 funds available for the New Benicia-Martinez Bridge Project. An equivalent amount of seismic funds will be used on the deck joint work, which is included in the budget above.

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### Other Completed Seismic Retrofit Projects

**Summary Description:** Caltrans has already completed the seismic retrofits of the West Spans of the SFOBB, the existing 1958 Carquinez Bridge, the existing Benicia-Martinez Bridge, the San Mateo-Hayward Bridge, and two former toll bridges in Southern California.

Other Completed Seismic Retrofit Projects Cost Summary (\$ Millions)

Project a	AB 144 / SB 66 Budget (07/2005) b	Approved Changes	Current Approved Budget (09/2007) d = b + c	Cost To Date (08/2007)	Cost Forecast (09/2007)	Variance g = f - d
u I		,	<del>a 5</del> 10	Ū	'	9 1 u
San Francisco-Oakland Bay Bridge West Span Seismic Retrofit Project	307.9	-	307.9	301.1	307.9	-
Carquinez Bridge Retrofit Project	114.2	-	114.2	114.2	114.2	-
Benicia-Martinez Bridge Retrofit Project	177.8	-	177.8	177.8	177.8	-
San Mateo-Hayward Bridge Retrofit Project	163.5	-	163.5	163.4	163.5	-
Vincent Thomas Bridge Retrofit Project	58.5	-	58.5	58.4	58.5	-
San Diego-Coronado Bridge Retrofit Project	103.5	-	103.5	102.6	103.5	-
TOTAL	925.4	-	925.4	917.5	925.4	-

Note: Details may not sum to totals due to rounding effects. Capital Outlay Support and Capital Outlay have been combined.

Other Completed Seismic Retrofit Projects Schedule Summary

Project	Actual Project Completion Date
Vincent Thomas Bridge Retrofit	May 2000
San Mateo-Hayward Bridge Retrofit	June 2000
Carquinez Bridge Retrofit	January 2002
San Diego-Coronado Bridge Retrofit	June 2002
Benicia-Martinez Bridge Retrofit	August 2002
SFOBB West Span Seismic Retrofit	June 2004

**Summary Status:** Construction has been completed on the above-listed projects. The Estimate at Completion amounts shown above includes allowances for minor project closeout costs.

Contract Issues: None.

### Other Toll Bridges

#### **Dumbarton and Antioch Bridges**

State Route 84 crosses the southern region of San Francisco Bay between the cities of Newark to the east and East Palo Alto to the west. The Route consists of three lanes in each direction and an eight-foot bicycle/pedestrian lane. The AADT of the Route is near 70,000. The bridge is over 2 km in length and is positioned in an approximately normal geometry between two seismic faults which the USGS has reported to pose most of the significant seismic threat to the San Francisco Bay Area: the San Andreas Fault, some 15 km to the west of the bridge; and the Hayward Fault, some 13 km to the east of the bridge.

State Route 160 crosses the San Joaquin River between the city of Antioch and Sherman Island (leading to Rio Vista) via the Antioch Bridge. The Bridge carries a single lane of traffic in each direction. The AADT for the Route is slightly over 10,000 vehicles per day. The bridge is threatened by the Bird's Landing Seismic Zone, Cost Range/Sierra Nevada Boundary Zone, and the San Andreas Fault.

#### **Cost and Schedule**

A cost estimate, schedule and an initial risk analysis have been developed to complete a comprehensive seismic analysis for each bridge. In June 2006, BATA approved \$17.8 million in funding to proceed with the comprehensive seismic analysis of the bridges. The current forecast of expenditures is within the \$17.8 million budgeted.

In September 2006, BATA entered into contract with a geotechnical and geophysical consultant to evaluate the bridges. In April 2007, the field-drilling program was completed and the majority of the laboratory testing was completed by June 2007. Minor laboratory testing to fill in data gaps may be required in the future. Current progress indicates that the Caltrans' designers will complete, as scheduled, the development of retrofit strategies for both bridges by early 2009.

#### **Current Progress**

These bridges are currently being evaluated for seismic safety and post-earthquake performance. Work is underway in three specific areas: seismology, geology and geotechnical engineering, and bridge structural engineering.

Work in the area of seismology is defining the seismic ground motions used for design. Recommended Safety Evaluation (SE) level motions have been developed for both bridges and are currently under review by an external and independent Seismic Safety Peer Review Panel (SSPRP). SE motions represent future large earthquakes. Work in this area to be completed in the near future includes finalizing the SE motions, developing lower level Functional Evaluation (FE) motions, and multiple earthquake time-histories that can be used in the checking phase of the projects. Draft reports have been released. The SE motions have been reviewed by the Toll Bridge Seismic Safety Peer Review Panel on a couple of occasions.

Work in the area of geology and geotechnical engineering includes field drilling and studying of soil samples to identify soil types, locations, and engineering properties. This work supports work in defining how the soil at the bridge sites move during earthquakes and how rigidly the bridge's foundations are held in the soil. The drilling operations are complete at both bridge sites; information is being shared with the seismologic team and the bridge structure team. Draft reports have been released.

Work in the area of bridge structural engineering is continues for both bridges. The structures team to date has been collecting and evaluating structural information on the bridges, reducing that information for use in computer models of the bridges, and initiating early computational runs of the models. Geological, geotechnical, and seismological information from the work areas mentioned previously is being incorporated into the bridge evaluations. The design team is currently analyzing the design of the existing structures. Caltrans is also working with the Peer Review Committee to obtain approval of the proposed design.



# **PROJECT / CONTRACT REPORTS**

# Regional Measure 1 Program

New Benicia-Martinez Bridge Project Summary

- New Benicia-Martinez Bridge Contract
- Other Contracts and Related Project Activities

New Carquinez Bridge Project

Richmond-San Rafael Bridge Deck Overlay Project Interstate 880 / State Route 92 Interchange Reconstruction Other Completed Regional Measure 1 Projects

- San Mateo-Hayward Bridge Widening Project
- Richmond Parkway Project
- Bayfront Expressway Widening Project
- Richmond-San Rafael Bridge Trestle, Fender, and Deck Joint Rehabilitation Project

# Regional Measure 1 Program

# New Benicia-Martinez Bridge Project Summary

**Project Description:** The new Benicia-Martinez Bridge project has constructed a new parallel bridge just east of the existing bridge. The project includes reconstructed interchanges to the north and south of the bridges and a new toll plaza and administration building in Martinez.

New Benicia-Martinez Bridge Project Cost Summary (\$ Millions)

Contract	BATA Budget (07/2005)	Approved Changes	Current Approved Budget (09/2007)	Cost To Date (08/2007)	Cost Forecast (09/2007)	Variance
a	b	С	d = b + c	е	f	g = f - d
Capital Outlay Support	157.1	36.5	193.6	174.4	189.1	(4.5)
Right-of-Way and Others	20.4	(0.1)	20.3	12.3	20.3	-
Capital Outlay						-
New Bridge	672.0	100.9	772.9	749.2	772.9	-
I-680/I-780 Interchange Replacement	76.3	22.5	98.8	96.3	98.8	-
I-680/Marina Vista Interchange Reconstruction	51.5	8.1	59.6	56.1	59.6	-
New Toll Plaza	24.3	2.0	26.3	22.9	26.3	-
Existing Bridge & Interchange Modifications	17.2	43.8	61.0	-	61.0	-
Other	20.3	(1.3)	19.0	15.3	19.0	-
Project Reserve	20.8	1.7	22.5	-	27.0	4.5
TOTAL	1,059.9	214.1	1,274.0	1,126.5	1,274.0	-

Note: Details may not sum to totals due to rounding effects.

**New Benicia-Martinez Bridge Project Schedule Summary** 

Contract	BATA Contract Completion Baseline (07/2005)	Approved Changes (Months)	Contract Complete Current Approved Schedule (09/2007)	Contract Complete Schedule Forecast (09/2007)	Schedule Variance (Months)
I-680/Marina Vista Interchange Reconstruction	March 2006	1	April 2006	April 2006	-
New Toll Plaza	June 2006	-	May 2007	May 2007	-
New Benicia-Martinez Bridge	December 2007	-	October 2007	October 2007	-
I-680/I-780 Interchange Replacement	December 2007	-	December 2007	December 2007	-
Open to Traffic	December 2007	-	August 2007	August 2007	-
Existing Bridge & Interchange Modifications	December 2009	-	December 2009	December 2009	-

<sup>\*</sup> The budget and estimate at completion includes approximately \$33 million in non-toll bridge funds (Proposition 192 and SHOPP).

#### **Contract Status:**

**New Benicia-Martinez Bridge:** The New Benicia-Martinez Bridge was opened to traffic on August 25, 2007. The new bridge carries five lanes of northbound Interstate 680 traffic (two additional lanes) and features a new expanded toll plaza with the Bay Area's first Open-Road Tolling (ORT) FasTrak Express Lanes.

With the ORT express lanes, vehicles paying their toll via FasTrak can pay electronically at highway speeds. Remaining work includes punchlist and final electrical items on the New Bridge and I-680/I-780 Interchange contracts which are expected to be completed by the end of the year.

**Toll Plaza and Administration Building:** The contract is 100% complete based on contractor payment. The Contractor has completed all work on the Operations Building, Toll Plaza and Courtyard. The Plant Establishment Period ended on May 14, 2007. The contract was accepted on May 18, 2007 and the Proposed Final Estimate (PFE) has been issued. The Contractor has submitted their response to the PFE, which is currently being reviewed by Caltrans. A number of claims that have been filed by the Contractor remain to be resolved.

**I-680/I-780 Interchange:** The contract is approximately 99% complete based on the current revised schedule. To-date, all of the bridge structures are substantially complete. Final electrical work for the new Benicia-Martinez Bridge and the interchange is expected to be complete by December 2007.

**Existing Bridge & Interchange Modification Contract:** The bid document was advertised on August 6, 2007 with the bid opening date re-scheduled to October 31, 2007 by Addendum # 1. Another addendum is currently being prepared to incorporate review comments from Construction to revise the contract documents. This construction contract will have duration of 2 years, The cost of the rehabilitation work will be funded from the project contingency.

# **Project Photographs**



The New Toll Plaza Building



The New Bridge



New Benicia Toll Plaza



Congressman Miller Crossing the New Bridge and Entering Toll Plaza



Under the New Bridge



The New Deck Looking South



Vintage Fire Truck Crossing Bridge



Band playing at the Bridge Opening Ceremony



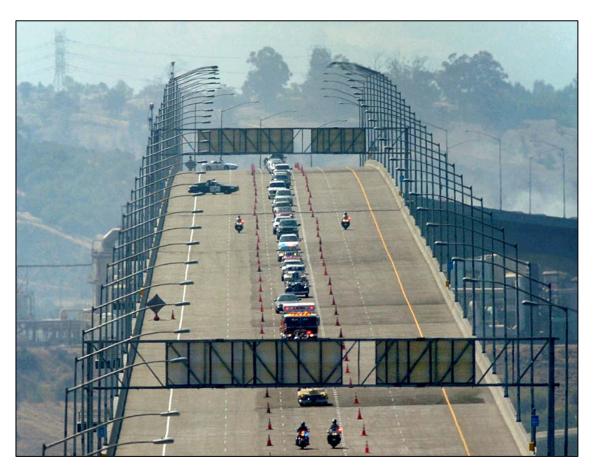
The New Bridge Looking North





The New Toll Plaza

Under the New Toll Plaza



The First Convoy of Cars Inaugurates the New Span

# Regional Measure 1 Program

# New Carquinez Bridge Project

**Project Description:** The new Carquinez Bridge project involves constructing a new suspension bridge west of the existing bridges with four westbound lanes and a bicycle/pedestrian lane and demolishing the existing 1927 bridge.

**New Carquinez Bridge Cost Summary (\$ Millions)** 

Contract	BATA Budget (07/2005)	Approved Changes	Current Approved Budget (09/2007)	Cost To Date (08/2007)	Cost Forecast (09/2007)	Variance
a	b	С	d = b + c	е	f	g = f - d
Capital Outlay Support	124.4	(0.2)	124.2	120.8	122.4	(1.8)
Capital Outlay Construction						-
Replacement Bridge	253.3	4.0	257.3	255.9	257.3	-
South Interchange	73.9	-	73.9	71.9	73.9	-
Existing 1927 Bridge	35.2	-	35.2	29.1	35.2	-
Other	29.3	(0.8)	28.5	25.3	28.5	-
Project Reserve	12.1	(3.0)	9.1	-	0.9	(8.2)
TOTAL	528.2	-	528.2	503.0	518.2	(10.0)

Note: Details may not sum to totals due to rounding effects.

**New Carquinez Bridge Schedule Summary** 

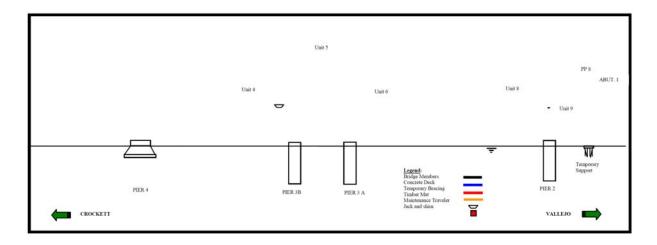
Contract	BATA Contract Completion Baseline (07/2005)	Approved Changes (Months)	Contract Complete Current Approved Schedule (09/2007)	Contract Complete Schedule Forecast (09/2007)	Schedule Variance (Months)
New Carquinez Bridge	December 2003*	-	December 2003*	December 2003*	-
1927 Carquinez Bridge Demolition	September 2007	-	December 2007	December 2007	-
Landscaping	August 2011	-	August 2011	August 2011	-

<sup>\*</sup> The date shown is for the opening of the bridge to traffic.

Project Status: The new replacement bridge and all its approaches have been completed and opened to traffic in November 2003. The demolition contract to remove the 1927 bridge, which was awarded in April 2005, is approximately 90% complete based on schedule. However, based on payment, this contract is 93% complete, as the biggest pay item in the contract is the 1958 bridge approach deck replacement, which was completed in November 2005. The removal of the entire 1927 bridge (Main Truss) was completed in September 2007. Other remaining work to be done, which was added by numerous change orders, includes the installation of the Austin Vault Sand Filter, and removal of the base and surfacing in the median south of the approach. Realignment of the local Wanda Street and the construction of the new bike path is on going until November 2007.

Project Issues: None

# **Project Diagram and Photographs:**





Looking North at the Demolished Carquinez Bridge



The East End of the Wanda Street Realignment



Looking South of the Recently Demolished 1927 Carquinez Bridge



The Southside of the Carquinez Bridge Interchange

# Regional Measure 1 Program

# Interstate 880/State Route 92 Interchange Reconstruction Project

**Project Description:** Modify the existing cloverleaf interchange to increase capacity and improve safety and traffic operations.

Interstate 880/State Route 92 Interchange Cost Summary (\$ Millions)

Contract	BATA Budget (07/2005)	Approved Changes	Current Approved Budget (09/2007)	Cost To Date (08/2007)	Cost Forecast (09/2007)	Variance -
a	b	С	d = b + c	e	f	g = f - d
I-880/SR-92 Interchange Improvement						
Capital Outlay Support	28.8	26.2	55.0	32.7	55.0	-
Capital Outlay Construction	94.8	60.2	155.0	-	155.0	-
Capital Outlay Right-of-Way	9.9	5.1	15.0	8.3	15.0	-
Project Reserve	0.3	19.7	20.0	-	20.0	-
TOTAL	133.8	111.2	245.0	41.0	245.0	-

Note: Details may not sum to totals due to rounding effects. \$9.6 million in ACTA funds included under Capital Outlay Construction. \$3.0 million included in Capital Outlay Construction and \$1.0 million in Capital Outlay Support for separate landscape contract.

Interstate 880/State Route 92 Interchange Schedule Summary

Project	BATA Project Completion Baseline (07/2005)	Approved Changes (Months)	Project Complete Current Approved Schedule (09/2007)	Contract Complete Schedule Forecast (09/2007)	Schedule Variance (Months)
I-880/SR-92 Interchange Reconstruction	December 2010	-	June 2011	June 2011	-

**Project Status:** On August 28, 2007, Caltrans awarded the Interstate 880/State Route 92 Interchange Reconstruction contract to the joint venture of FCI and Granite Construction for \$138.4 million.

The construction contract was approved on September 28, 2007. Construction is expected to begin in the latter half of October 2007. Using 813 working days and factoring in weather inclement days, construction duration is expected to be less than four years and to be completed by June 2011. Utility relocation work is ongoing. Caltrans is meeting with the utility companies on a weekly basis to closely monitor the progress and ensure the relocation work will be completed on time to avoid Right of Way delay

# **Project Photographs:**



Interstate 880/State Route 92 Interchange BEFORE



Interstate 880/State Route 92 Interchange AFTER

# Regional Measure 1 Program

# Other Completed Regional Measure 1 (RM1) Projects

Summary Description: Other completed Regional Measure 1 projects are the following: (a) Widen the San Mateo-Hayward Bridge along its low-trestle section and its eastern approach; (b) Widen the Bayfront Expressway (SR 84) from the Dumbarton Bridge to the U.S. 101/Marsh Road interchange; (c) Construct an eastern approach (Richmond Parkway) between the Richmond-San Rafael Bridge and Interstate 80 near Pinole; (d) Modify the U.S. 101/University Avenue interchange; (e) Richmond-San Rafael Bridge Trestle, Fender and Deck Joint Rehabilitation Project; and (f) Richmond-San Rafael Bridge Deck Overlay Project.

Other Completed RM1 Projects Cost Summary (\$ Millions)

Contract a	BATA Budget (07/2005) b	Approved Changes c	Current Approved Budget (09/2007) d = b + c	Cost To Date (08/2007)	Cost Forecast (09/2007)	Variance g = f - d
San Mateo-Hayward Bridge Widening Project	217.8	-	217.8	208.7	212.4	(5.4)
Bayfront Expressway Widening Project	36.1	-	36.1	33.3	36.0	(0.1)
Richmond Parkway Project	5.9	-	5.9	4.3	5.9	-
U.S. 101/University Interchange	3.8	-	3.8	3.7	3.8	-
RSR Trestle, Fender, and Joint Rehabilitation	102.1	-	102.1	96.3	97.1	(5.0)
RSR Deck Overlay	25.0	-	25.0	19.6	25.0	-
TOTAL	390.7	-	390.7	365.9	380.2	(10.5)

**Schedule Summary** 

Project	Actual Project Completion Date
Richmond Parkway Project	May 2001
San Mateo-Hayward Bridge Widening Project	February 2003
Bayfront Expressway Widening Project	January 2004
U.S. 101/University Interchange	April 2004
Richmond-San Rafael Bridge Trestle, Fender and Deck Joint Rehabilitation	August 2005
RSR Deck Overlay	December 2006

**Project Status:** Construction has been completed on the above listed contracts.

Project Issues: None.

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# **APPENDICES**

- A Toll Bridge Seismic Retrofit Program: San Francisco-Oakland Bay Bridge (SFOBB) East Span Replacement Project Cost Detail
- B Toll Bridge Seismic Retrofit Program Cost Detail
- **C** Toll Bridge Seismic Retrofit Program Summary Schedule
- D Regional Measure 1 Program Cost Detail
- **E** Regional Measure 1 Program Summary Schedule

<sup>\*</sup> Forecasts for the Monthly Reports are generally updated on a quarterly basis in conjunction with Risk Analysis assessments for the TBSRP Projects and the TBSRP Quarterly Reports.

# Appendix A: Toll Bridge Seismic Retrofit Program (\$ Millions)

# San Francisco-Oakland Bay Bridge (SFOBB) East Span Replacement Project Cost Detail

Contract	EA Number	AB 144 / SB 66 Budget (07/2005)	Approved Changes	Current Approved Budget (08/2007)	Cost To Date (08/2007)	Cost Forecast (08/2007)	At-Completion Variance
а	b	С	d	e = c + d	f	g	h = g - e
San Francisco-Oakland Bay Bridge East Span Replacement Project							
East Span - Skyway	01202X	407.0		407.0	400.0	407.0	
Capital Outlay Support Capital Outlay Construction		197.0 1,293.0	-	197.0 1,293.0	169.0 1,180.0	197.0 1,293.0	_
Total		1,490.0	-	1,490.0	1,349.0	1,490.0	-
East Span - SAS E2/T1 Foundations	0120EX	,		,	,	,	_
Capital Outlay Support		52.5	(11.0)	41.5	23.4	41.5	-
Capital Outlay Construction		313.5	-	313.5	242.7	313.5	-
Total		366.0	(11.0)	355.0	266.1	355.0	-
East Span - SAS Superstructure	0120FX						
Capital Outlay Support		214.6	-	214.6	47.0	214.6	
Capital Outlay Construction		1,753.7	-	1,753.7	286.9	1,767.4	13.7
Total		1,968.3	-	1,968.3	333.9	1,982.0	13.7
SAS W2 Foundations	0120CX	40.0		40.0	0.0	40.0	
Capital Outlay Support Capital Outlay Construction		10.0 26.4	-	10.0 26.4	9.2 25.8	10.0 26.4	-
Total		36.4	-	36.4	35.0	36.4	-
	040000	00.1		00.1	00.0	00.1	
YBI South/South Detour Capital Outlay Support	0120RX	29.5	10.0	39.5	27.4	39.5	_
Capital Outlay Construction		131.9	202.5	334.4	90.5	334.4	-
Total		161.4	212.5	373.9	117.9	373.9	-
YBI Transition Structures	0120PX						
Capital Outlay Support	01201 X	78.7	-	78.7	15.4	78.7	-
Capital Outlay Construction		299.3	(23.2)	276.1	-	276.1	-
Total		378.0	(23.2)	354.8	15.4	354.8	-
Oakland Touchdown (see notes below)	01204X						
Capital Outlay Support	0.120-170	74.4	-	74.4	26.0	92.1	17.7
Capital Outlay Construction		283.8	-	283.8	11.4	302.5	18.7
Total		358.2	-	358.2	37.4	394.6	36.4
* OTD Submarine Cable	0120K4						
Capital Outlay Support					0.7	3.0	
Capital Outlay Construction					7.4	9.6	
Total					8.1	12.6	
* OTD No. 1 (Westbound)	0120L4						
Capital Outlay Support					4.9	49.9	
Capital Outlay Construction					4.0	226.5	
Total					8.9	276.4	
* OTD No. 2 (Eastbound)	0120M4						
Capital Outlay Support					0.3	15.8	
Capital Outlay Construction					-	62.0	
Total					0.3	77.8	
* OTD Electrical Systems	0120N4						
Capital Outlay Support					0.1	1.4	
Capital Outlay Construction					-	4.4	
Total					0.1	5.8	

Notes: Oakland Touchdown Cost-to-Date and Cost Forecast includes prior-to-split Capital Outlay Support Costs.

<sup>\*</sup>Current contract allotment to install two submarine electrical cables is \$11.5 million. Additional non-program funding to support this allocation beyond the \$9.6 million of available programs funds has been made available by the Treasure Island Development Authority

# Appendix A: Toll Bridge Seismic Retrofit Program (\$ Millions)

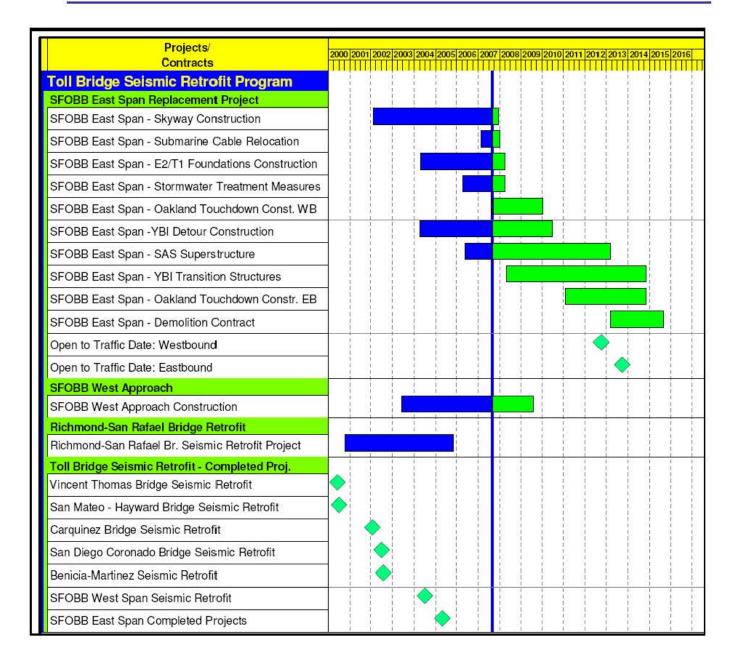
# San Francisco-Oakland Bay Bridge (SFOBB) East Span Replacement Project Cost Detail (Cont'd.)

Contract	EA Number	AB 144 / SB 66 Budget (07/2005)	Approved Changes	Current Approved Budget (08/2007)	Cost To Date (08/2007)	Cost Forecast (08/2007)	At-Completion Variance
a	b	С	d	e = c + d	f	g	h = g - e
Existing Bridge Demolition Capital Outlay Support Capital Outlay Construction Total	01209X	79.7 239.2 318.9	- - -	79.7 239.2 318.9	0.3 - 0.3	79.7 222.0 301.7	- (17.2) (17.2)
YBI/SAS Archeology Capital Outlay Support Capital Outlay Construction Total	01207X	1.1 1.1	- -	1.1 1.1	1.1 1.1	1.1	- -
ı otal		2.2	-	2.2	2.2	2.2	-
YBI - USCG Road Relocation Capital Outlay Support Capital Outlay Construction Total	0120QX	3.0 3.0 6.0	- - -	3.0 3.0 6.0	2.7 2.8 5.5	3.0 3.0 6.0	- - -
YBI - Substation and Viaduct Capital Outlay Support Capital Outlay Construction Total	0120GX	6.5 11.6 18.1	-	6.5 11.6 18.1	6.4 11.3 17.7	6.5 11.6 18.1	-
Oakland Geofill Capital Outlay Support Capital Outlay Construction Total	01205X	2.5 8.2 10.7	- - -	2.5 8.2 10.7	2.5 8.2 10.7	2.5 8.2 10.7	- - - -
Pile Installation Demonstration Project Capital Outlay Support Capital Outlay Construction Total	01208X	1.8 9.2 11.0	- - -	1.8 9.2 11.0	1.8 9.2 11.0	1.8 9.2 11.0	- - -
Stormwater Treatment Measures Capital Outlay Support Capital Outlay Construction Total	0120JX	6.0 15.0 21.0	2.0 3.3 5.3	8.0 18.3 26.3	7.2 13.5 20.7	8.0 18.3 26.3	- - -
Right-of-Way and Environmental Mitigation Capital Outlay Support Capital Outlay & Right-of-Way Total	0120X9	72.4 72.4	- - -	72.4 72.4	- 38.8 38.8	72.4 72.4	- - -
	04343X & 0	4300X					
Sunk Cost - Existing East Span Retrofit Capital Outlay Support Capital Outlay Construction Total		39.5 30.8 70.3	- - -	39.5 30.8 70.3	39.5 30.8 70.3	39.5 30.8 70.3	- - -
Other Capital Outlay Support Environmental Phase Pre-Split Project Expenditures Non-project Specific Costs Total		97.7 44.9 20.0 162.6	- - (1.0) (1.0)		97.7 44.9 3.2 145.8	97.7 44.9 19.0 161.6	- - -
Subtotal Capital Outlay Support		959.4	-	959.4	524.7	977.1	17.7
Subtotal Capital Outlay Construction Other Budgeted Capital		4,492.1 35.1	182.5 (3.3)	4,674.6 31.8	1,953.0 0.6	4,689.9 7.7	15.2 (24.1)
Total SFOBB East Span Replacement Project		5,486.6	179.2	5,665.8	2,478.3	5,674.7	8.9

# Appendix B: Toll Bridge Seismic Retrofit Program Cost Detail (\$ Millions)

Contract	AB 144 / SB 66 Budget (07/2005)	Approved Changes	Current Approved Budget (08/2007)	Cost To Date (08/2007)	Cost Forecast (08/2007)	At-Completion Variance
а	С	d	e = c + d	f	g	h = g - e
SFOBB East Span Replacement Project						
Capital Outlay Support	959.4		959.4	524.7	977.1	17.7
Capital Outlay Support  Capital Outlay Construction		- 182.5	4.674.6	1.953.0	4.689.9	17.7
Other Budgeted Capital	4,492.1 35.1		,	,	,	
Total		(3.3)	31.8	0.6	7.7	(24.1)
	5,486.6	179.2	5,665.8	2,478.3	5,674.7	8.9
SFOBB West Approach Replacement	400.0		400.0	00.7	400.0	
Capital Outlay Support	120.0	-	120.0	96.7	120.0	-
Capital Outlay Construction	309.0	-	309.0	253.3	309.0	-
Total	429.0	-	429.0	350.0	429.0	-
SFOBB West Span Retrofit	75.0		75.0	740	75.0	-
Capital Outlay Support	75.0	-	75.0	74.8	75.0	-
Capital Outlay Construction	232.9	-	232.9	226.3	232.9	-
Total	307.9	-	307.9	301.1	307.9	-
Richmond-San Rafael Bridge Retrofit						
Capital Outlay Support	134.0	(7.0)	127.0	126.6	127.0	-
Capital Outlay Construction	780.0	(82.0)	698.0	666.5	698.0	-
Total	914.0	(89.0)	825.0	793.1	825.0	-
Benicia-Martinez Bridge Retrofit						-
Capital Outlay Support	38.1	-	38.1	38.1	38.1	-
Capital Outlay Construction	139.7	-	139.7	139.7	139.7	-
Total	177.8	-	177.8	177.8	177.8	-
Carquinez Bridge Retrofit						
Capital Outlay Support	28.7	-	28.7	28.8	28.7	-
Capital Outlay Construction	85.5	-	85.5	85.4	85.5	-
Total	114.2	-	114.2	114.2	114.2	-
San Mateo-Hayward Bridge Retrofit						-
Capital Outlay Support	28.1	-	28.1	28.1	28.1	-
Capital Outlay Construction	135.4	-	135.4	135.3	135.4	-
Total	163.5	-	163.5	163.4	163.5	-
Vincent Thomas Bridge Retrofit (Los Angeles)						
Capital Outlay Support	16.4	_	16.4	16.4	16.4	_
Capital Outlay Construction	42.1	_	42.1	42.0	42.1	_
Total	58.5	_	58.5	58.4	58.5	_
San Diego-Coronado Bridge Retrofit	30.5		30.3	30.4	30.3	
Capital Outlay Support	33.5	_	33.5	33.2	33.5	_
Capital Outlay Construction	70.0		70.0	69.4	70.0	_
Total	103.5	_	103.5	102.6	103.5	_
		(7.0)				-
Subtotal Capital Outlay Support	1,433.2	(7.0)	1,426.2	967.4	1,443.9	17.7
Subtotal Capital Outlay	6,286.7	100.5	6,387.2	3,570.9	6,402.5	15.3
Subtotal Other Budgeted Capital	35.1	(3.3)	31.8	0.6	7.7	(24.1)
Miscellaneous Program Costs	30.0	-	30.0	24.7	30.0	-
Subtotal Toll Bridge Seismic Retrofit Program	7,785.0	90.2	7,875.2	4,563.6	7,884.1	8.9
Program Contingency	900.0	(90.2)	809.8	-	800.9	(8.9)
Total Toll Bridge Seismic Retrofit Program	8,685.0	-	8,685.0	4,563.6	8,685.0	-

# Appendix C: Toll Bridge Seismic Retrofit Program Summary Schedule



# Appendix D: Regional Measure 1 Program Cost Detail (\$ Millions)

Project a	EA Number b	(07/2005)	Changes	(08/2007)	(08/2007)	(08/2007)	At-Completion Variance
		С	d	e = c + d	f	g	h = g - e
						_	
New Benicia-Martinez Bridge Project							
New Bridge	00603_						/= =:
Capital Outlay Support		84.9	7.7	92.6	89.0	89.8	(2.8)
Capital Outlay Construction							-
BATA Funding		661.9	100.9	762.8	739.1	762.8	-
Non-BATA Funding		10.1		10.1	10.1	10.1	-
Subtotal		672.0	100.9	772.9	749.2	772.9	-
Total		756.9	108.6	865.5	838.2	862.7	(2.8)
I-680/I-780 Interchange Reconstruction	00606						
Capital Outlay Support	-						
BATA Funding		24.9	5.2	30.1	29.0	30.1	-
Non-BATA Funding		1.4	5.2	6.6	6.3	6.6	-
Subtotal		26.3	10.4	36.7	35.3	36.7	-
Capital Outlay Construction							
BATA Funding		54.7	22.5	77.2	74.6	77.2	_
Non-BATA Funding		21.6	_	21.6	21.7	21.6	_
Subtotal		76.3	22.5	98.8	96.3	98.8	_
Total		102.6	32.9	135.5	131.6	135.5	-
I-680/Marina Vista Interchange Reconstruction	00605						
Capital Outlay Support	00605_	18.3	1.8	20.1	19.8	20.0	(0.1)
Capital Outlay Support Capital Outlay Construction		51.5	8.1	59.6	56.1	59.6	(0.1)
Total		69.8	9.9	79.7	75.9	79.6	(0.1)
							, ,
New Toll Plaza and Administration Building	00604_						
Capital Outlay Support		11.9	3.8	15.7	15.4	15.7	-
Capital Outlay Construction		24.3	2.0	26.3	22.9	26.3	-
Total		36.2	5.8	42.0	38.3	42.0	-
Existing Bridge & Interchange Modifications	0060A_						
Capital Outlay Support	_	4.3	14.3	18.6	8.5	18.6	-
Capital Outlay Construction							
BATA Funding		17.2	32.8	50.0	-	50.0	-
Non-BATA Funding		-	11.0	11.0	-	11.0	-
Subtotal		17.2	43.8	61.0	-	61.0	-
Total		21.5	58.1	79.6	8.5	79.6	-
Other Contracts	See note below						
Capital Outlay Support	Coe note below	11.4	(1.5)	9.9	6.4	8.3	(1.6)
Capital Outlay Construction		20.3	(1.3)	19.0	15.3	19.0	(1.0)
Capital Outlay Right-of-Way		20.4	(0.1)	20.3	12.3	20.3	_
Total		52.1	(2.9)	49.2	34.0	47.6	(1.6)
			, ,				
Subtotal BATA Capital Outlay Support		155.7	31.3	187.0	168.1	182.5	(4.5)
Subtotal BATA Capital Outlay Construction		829.9	165.0	994.9	908.0	994.9	-
Subtotal Capital Outlay Right-of-Way		20.4	(0.1)	20.3	12.3	20.3	-
Subtotal Non-BATA Capital Outlay Support		1.4	5.2	6.6	6.3	6.6	-
Subtotal Non-BATA Capital Outlay Construction		31.7	11.0	42.7	31.8	42.7	-
Project Reserves		20.8	1.7	22.5	-	27.0	4.5
Total New Benicia-Martinez Bridge Project		1,059.9	214.1	1,274.0	1,126.5	1,274.0	-

Notes:

Includes EA's 00601\_,00603\_,00605\_,00606\_, 00608\_, 00609\_, 0060A\_, 0060C\_, 0060E\_, 0060F\_, 0060G\_, and 0060H\_ and all Project Right-of-Way

# Appendix D: Regional Measure 1 Program Cost Detail (\$ Millions) (Cont'd.)

Project	EA Number	BATA Budget (07/2005)	Approved Changes	Current Approved Budget (08/2007)	Cost To Date (08/2007)	Cost Forecast (08/2007)	At-Completion Variance
a	b	С	d	e = c + d	f	g	h = g - e
Carquinez Bridge Replacement Project							
New Bridge	01301_						
Capital Outlay Support		60.5	(0.3)	60.2	60.2	60.2	-
Capital Outlay Construction		253.3	4.0	257.3	255.9	257.3	-
Total		313.8	3.7	317.5	316.1	317.5	-
Crockett Interchange Reconstruction	01305_						
Capital Outlay Support		32.0	(0.1)	31.9	31.9	32.0	0.1
Capital Outlay Construction		73.9	- '	73.9	71.9	73.9	-
Total		105.9	(0.1)	105.8	103.8	105.9	0.1
Existing 1927 Bridge Demolition	01309						
Capital Outlay Support	- · · · · · -	16.1	-	16.1	13.3	14.2	(1.9)
Capital Outlay Construction		35.2	-	35.2	29.1	35.2	`-
Total		51.3	-	51.3	42.4	49.4	(1.9)
Other Contracts	See note belov	v					
Capital Outlay Support		15.8	0.2	16.0	15.4	16.0	_
Capital Outlay Construction		18.8	(0.8)	18.0	15.4	18.1	0.1
Capital Outlay Right-of-Way		10.5	-	10.5	9.9	10.4	(0.1)
Total		45.1	(0.6)	44.5	40.7	44.5	0.0
Subtotal BATA Capital Outlay Support		124.4	(0.2)	124.2	120.8	122.4	(1.8)
Subtotal BATA Capital Outlay Construction		381.2	3.2	384.4	372.3	384.5	0.1
Subtotal Capital Outlay Right-of-Way		10.5	3.2	10.5	9.9	10.4	(0.1)
Project Reserves		12.1	(3.0)	9.1	9.9	0.9	(8.2)
Floject Reserves		12.1	(3.0)	9.1	-	0.9	(0.2)
Total Carquinez Bridge Replacemen	t Project	528.2	-	528.2	503.0	518.2	(10.0)

Notes:

Other Contracts includes EA's 01301\_,01302\_, 01303\_, 01304\_,01305\_, 01306\_, 01307\_, 01308\_, 01309\_,0130A\_, 0130C\_, 0130D\_, 0130F\_, 0130G\_, 0130H\_, 0130J\_, 00453\_, 00493\_, 04700\_, 00607\_, 2A270\_, and 29920\_ and all Project Right-of-Way

# Appendix D: Regional Measure 1 Program Cost Detail (\$ Millions) (Cont'd.)

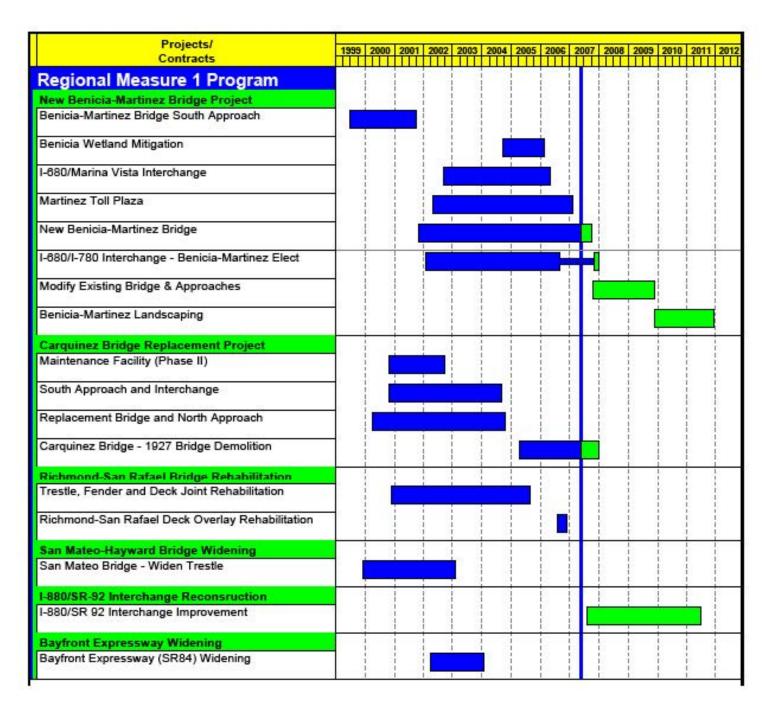
Project	EA Number	BATA Budget (07/2005)	Approved Changes	Current Approved Budget (08/2007)	Cost To Date (08/2007)	Cost Forecast (08/2007)	At-Completion Variance
a	b	С	ď	e = c + d	f	g	h = g - e
Richmond-San Rafael Bridge Trestle, Fender, and Deck Joint Rehabilitation	See note 1 belo	DW.					
Capital Outlay Support	See note beit	JW					
BATA Funding		2.2	_	2.2	1.4	2.2	_
Non-BATA Funding		8.6	_	8.6	10.4	10.4	1.8
Subtotal		10.8	-	10.8	11.8	12.6	1.8
Capital Outlay Construction		.0.0				.2.0	
BATA Funding		40.2	_	40.2	33.4	33.4	(6.8)
Non-BATA Funding		51.1	-	51.1	51.1	51.1	-
Subtotal		91.3	-	91.3	84.5	84.5	(6.8)
Project Reserves		-	-	-	-	-	-
Total		102.1	-	102.1	96.3	97.1	(5.0)
Bishoroud Con Refeel Bridge Book Conden							
Richmond-San Rafael Bridge Deck Overlay Rehabilitation	04152						
Capital Outlay Support	· · · · · · ·						
BATA Funding		4.0	(0.4)	3.6	3.3	3.6	_
Non-BATA Funding		4.0	(4.0)	-	-	-	_
· ·		8.0	. ,	3.6	3.3	3.6	-
Subtotal Capital Outlay Construction		16.9	(4.4) 3.6	20.5	16.3	3.6 16.2	(4.2)
Project Reserves		0.1	0.8	0.9	10.3	5.2	(4.3) 4.3
Total		25.0	0.6	25.0	19.6	25.0	4.3
Total		25.0		25.0	13.0	25.0	
Richmond Parkway Project (RM 1 Share Only) Capital Outlay Support	Non-Caltrans	_	_	_	_	_	_
Capital Outlay Construction		5.9	-	5.9	4.3	5.9	_
Total		5.9	-	5.9	4.3	5.9	-
San Mateo-Hayward Bridge Widening							
	See note 2 belo	ow					
Capital Outlay Support		34.6	(0.3)	34.3	34.1	34.3	-
Capital Outlay Construction		180.2	-	180.2	174.1	177.2	(3.0)
Capital Outlay Right-of-Way		1.5	-	1.5	0.5	0.6	(0.9)
Project Reserves		1.5	0.3	1.8	-	0.3	(1.5)
Total		217.8	-	217.8	208.7	212.4	(5.4)
I-880/SR-92 Interchange Reconstruction	EA's 23317_, 0	1601_, and 01					
Capital Outlay Support		28.8	26.2	55.0	32.7	55.0	-
Capital Outlay Construction							
BATA Funding		85.2	60.2	145.4	-	145.4	-
Non-BATA Funding		9.6	-	9.6	-	9.6	-
Subtotal		94.8	60.2	155.0	-	155.0	-
Capital Outlay Right-of-Way		9.9	5.1	15.0	8.3	15.0	-
Project Reserves		0.3	19.7	20.0	-	20.0	-
Total		133.8	111.2	245.0	41.0	245.0	-
Bayfront Expressway Widening	EA's 00487_, 0	1511_, and 01	512_				
Capital Outlay Support		8.6	(0.3)	8.3	8.2	8.2	(0.1)
Capital Outlay Construction		26.5	-	26.5	24.9	26.5	-
Capital Outlay Right-of-Way		0.2	-	0.2	0.2	0.2	-
Project Reserves		0.8	0.3	1.1	-	1.1	-
Total		36.1	-	36.1	33.3	36.0	(0.1)
US 101/University Avenue Interchange Modification	Non-Caltrans						
Capital Outlay Support	Mon-Calualis	-	-	-	-	-	-
Capital Outlay Construction		3.8	-	3.8	3.7	3.8	-
Total		3.8	-	3.8	3.7	3.8	-
Subtotal BATA Capital Outlay Support		358.3	56.3	414.6	368.6	408.2	(6.4)
Subtotal BATA Capital Outlay Construction		1,569.8	232.0	1,801.8	1,537.0	1,787.8	(14.0)
Cabiciai DATA Capitai Catlay Construction		42.5	5.0	47.5	31.2	46.5	(14.0)
Subtotal Capital Outlay Right-of-Way		14.0	1.2	15.2	16.7	17.0	1.8
Subtotal Capital Outlay Right-of-Way Subtotal Non-BATA Capital Outlay Support				10.2	10.7	17.5	1.0
Subtotal Non-BATA Capital Outlay Support				103.4	82.9	103.4	-
Subtotal Non-BATA Capital Outlay Support Subtotal Non-BATA Capital Outlay Construction		92.4	11.0	103.4 55.4	82.9	103.4 54.5	
Subtotal Non-BATA Capital Outlay Support				103.4 55.4 <b>2,437.9</b>	82.9 - <b>2,036.4</b>	103.4 54.5 <b>2,417.4</b>	(0.9) <b>(20.5)</b>

Notes:

 $<sup>^{\</sup>rm 1}$  Richmond-San Rafael Bridge Trestle, Fender, and Deck Joint Rehabilitation Includes Non-TBSRA Expenses for EA 0438U\_ and 04157\_

<sup>&</sup>lt;sup>2</sup> San Mateo-Hayward Bridge Widening Includes EA's 00305\_, 04501\_, 04502\_, 04503\_, 04504\_, 04505\_, 04506\_, 04507\_, 04508\_, 04509\_, 27740\_, 27790\_, 04860\_

# Appendix E: Regional Measure 1 Program Summary Schedule



# Appendix F: Glossary of Terms

AB144/SB 66 BUDGET: The planned allocation of resources for the Toll Bridge Seismic Retrofit Program, or subordinate projects or contracts, as provided in Assembly Bill 144 and Senate Bill 66, signed into law by Governor Schwarzenegger on July 18, 2005 and September 29, 2005, respectively.

BATA BUDGET: The planned allocation of resources for the Regional Measure 1 Program, or subordinate projects or contracts as authorized by the Bay Area Toll Authority as of June 2005.

APPROVED CHANGES: For cost, changes to the AB144/SB 66 Budget or BATA Budget as approved by the Bay Area Toll Authority Commission. For schedule, changes to the AB 144/SB 66 Project Complete Baseline approved by the Toll Bridge Program Oversight Committee, or changes to the BATA Project Complete Baseline approved by the Bay Area Toll Authority Commission.

**CURRENT APPROVED BUDGET:** The sum of the AB144/SB66 Budget or BATA Budget and Approved Changes.

COST TO DATE: The actual expenditures incurred by the program, project or contract as of the month and year shown.

**COST FORECAST:** The current forecast of all of the costs that are projected to be expended so as to complete the given scope of the program, project, or contract.

AT COMPLETION VARIANCE or VARIANCE (cost): The mathematical difference between the Cost Forecast and the Current Approved Budget.

AB 144/SB 66 PROJECT COMPLETE BASELINE: The planned completion date for the Toll Bridge Seismic Retrofit Program or subordinate projects or contracts.

BATA PROJECT COMPLETE BASELINE: The planned completion date for the Regional Measure 1 Program or subordinate projects or contracts.

PROJECT COMPLETE CURRENT APPROVED SCHEDULE: The sum of the AB144/SB66 Project Complete Baseline or BATA Project Complete Baseline and Approved Changes.

**PROJECT COMPLETE SCHEDULE FORECAST:** The current projected date for the completion of the program, project, or contract.

SCHEDULE VARIANCE or VARIANCE (schedule): The mathematical difference expressed in months between the Project Complete Schedule Forecast and the Project Complete Current Approved Schedule.

The following information is provided in accordance with California Government code Section 7550:

This document is one of a series of reports prepared for the Bay Area Toll Authority (BATA)/Metropolitan Transportation Commission (MTC) for the Toll Bridge Seismic Retrofit and Regional Measure 1 Programs. The contract value for the monitoring efforts, technical analysis, and field site works that contribute to these reports, as well as the report preparation and production, is \$1,574,873.

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# **ITEM 3: PROGRESS REPORTS**

b. Draft Third Quarter Report, September 30, 2007



# Memorandum

TO: Toll Bridge Program Oversight Committee DATE: October 23, 2007

(TBPOC)

FR: Andrew Fremier, Deputy Executive Director, BATA

RE: Agenda No. - 3b

**Progress Reports** 

Item- Draft Third Quarter Report, September 30, 2007

### **Recommendation:**

For Information / APPROVAL

### **Cost:**

N/A

# **Schedule Impacts:**

N/A

### Discussion:

Attached, for information, are the Projected 3<sup>rd</sup> Quarter 2007 Report Production Schedule, which reflects the status of completed report tasks and the schedule for remaining actions, and the Draft Third Quarter Report, September 30, 2007.

The TBPOC is requested to grant the PMT authority to approve the Third Quarter Report, September 30, 2007 in its behalf after appropriate reviews and final comments on the proposed final draft are received.

# **Attachment:**

Projected 3<sup>rd</sup> Quarter 2007 Report Production Schedule Draft Third Quarter Report, September 30, 2007



# **Projected 3rd Quarter 2007 Report Production Schedule**

3rd Quarter 2007 Report: Legislated Deadline - November 14, 2007	
BAMC Begin Quarterly Report Development; Issue First Call for Input	Monday, September 17, 2007
BAMC Prepare Quarterly Report 1st Draft for PMT, BATA, Caltrans	Monday, October 08, 2007
PMT / BATA / Caltrans Review & Comment on 1st Draft	Thursday, October 11, 2007
BAMC Incorporate Comments: Produce 2nd Draft for TBPOC Review	Friday, October 12, 2007
TBPOC Review & Comment on 2nd Draft	Monday, October 15, 2007
Expenditure Update (Anticipated Date)	Monday, October 22, 2007
BAMC Incorporate Comments; Produce Proposed Final Draft for TBPOC and Agency	Tuesday, October 23, 2007
BAMC Issue Proposed Final Draft to TBPOC & Agency	Thursday, October 25, 2007
TBPOC and Agency Review / Comment on Proposed Final Draft	Friday, November 02, 2007
BAMC Incorporate Comments: Produce Advanced Final Draft + Table of Conflicting Comments	Wednesday, November 07, 2007
TBPOC Teleconference to make Final Comments and Resolve Conflicting Comments	Friday, November 09, 2007
BAMC Incorporate All Final Comments from TBPOC; Emails Final Version for Information	Tuesday, November 13, 2007
Produce & Issue Quarterly Report to Legislature & CTC	Wednesday, November 14, 2007

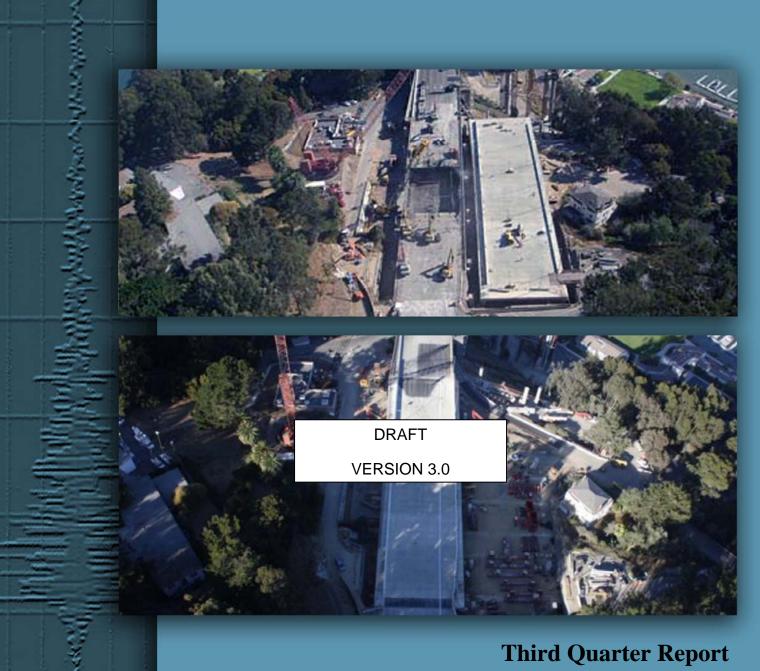




# TOLL BRIDGE PROGRAM OVERSIGHT COMMITTEE

CALTRANS BAY AREA TOLL AUTHORITY CALIFORNIA TRANSPORTATION COMMISSION

November 14, 2007



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# **Executive Summary**

The Toll Bridge Program Oversight Committee (TBPOC) submits the 2007 Third Quarter Report ending September 30, 2007 for the Toll Bridge Seismic Retrofit Program (TBSRP) in accordance with Assembly Bill (AB) 144 and Senate Bill (SB) 66. This report provides the following:

- 1. Information on the progress of each project in the program.
- 2. Baseline budget for Capital Outlay (CO) and Capital Outlay Support (COS).
- 3. Current projected costs for CO and COS.
- 4. Expenditures to date.
- 5. Comparison of the baseline schedule to the March 2007 projected schedule.
- 6. Summary of the milestones achieved during the quarter.
- 7. Major risk assessment for the remaining projects.
- 8. Summary of expenses incurred by the TBPOC in performing its duties.

# **Major Milestones During the Third Quarter** 2007

Significant progress on the completion of the seismic retrofit projects continued during this past quarter. Only one of the seven toll bridges in the TBSRP remains to be retrofitted. Appendix D includes a gallery of photos of construction activities on the bridge projects. The major milestones achieved during the quarter include:

The San Francisco-Oakland Bay Bridge (SFOBB) West Approach Project is 84 percent complete as of September 20, 2007 and is on schedule to finish in August 2009. The Harrison Off Ramp deck was completed in July 2007, and its falsework removed in August 2007. Major ongoing work during the quarter includes the rebuilding of the new EB 80 structure with column installation continuing throughout the summer and falsework installation to follow. An extensive public outreach effort continues and

- will be necessary until the spring of 2008 for the construction of the EB80 adjacent to Stillman Street area. Frame 7U temporary supports and falsework will continue through September 2007, and work on Frame 6U has commenced during this report period.
- The SFOBB East Span Seismic Replacement Project Skyway contract is expected to be completed in December 2007. Remaining work includes final post-tensioning of the bridge segments and spans, installation of cantilevered bicycle/pedestrian pathway and service platforms, electrical, polyester overlay, painting and punch list work, delivery and erection of the two hinge pipe beams at location E westbound, electrical, polyester overlay, and painting and punch list work.
- The SFOBB East Span Seismic Replacement Project Self-Anchored Suspension (SAS)





First Shipment of Steel Arriving from Korea

Marine Foundation East Pier and Tower Pier (E2/T1) contract is on schedule to be completed by March 2008. Caltrans and their contractor have completed most of the eastbound E2 foundation and column. At the Tower Pier (T1), all steel foundation casings and rock sockets have been installed. The basketball court-sized T1 footing box was set into place on March 17, 2007. The T1 bottom slab concrete has been placed and the bottom lift rebar cages for the E2 pier columns have been fabricated.

For the SFOBB East Span Seismic Replacement Project SAS Superstructure contract, American Bridge/Flour (ABF), the prime contractor for the project, has mobilized staff to their field offices at Pier 7 in Oakland and in China. ABF and their subcontractors continue to prepare and submit requests for information and submittals for Caltrans review and response. A final baseline schedule has been accepted by Caltrans. The contractor continues to finalize agreements with manufacturers, fabricators, suppliers and subcontractors. ABF has completed the design of the crane barge to be used to lift the heavy tower and deck sections. Barge fabrication is on going in Oregon. Civil construction work has started at the W2 foundation with falsework for the pier table. The fabricators for the temporary

towers and trusses have been selected by the contractor and fabrication is underway. Zhenhua Port Machinery Company (ZPMC) of Shanghai, China, who was contracted to supply and fabricate all the major steel structures in SAS including the tower, orthotropic box girders, and bike paths, is currently setting up their facilities to begin fabrication of the SAS tower and deck sections. ZPMC has prepared initial test mockups of the bridge sections and plans to begin production fabrication later in the fall of 2007 as final shop drawing submittals are approved.

- On the Project Yerba Buena Island Detour temporary structures contract, Caltrans is designing the East and West tie-ins from the existing bridge and tunnel to the detour structure. The construction of the tie-ins are being managed by Caltrans to be completed in conjunction with the SAS schedule to minimize impacts to the traveling public. YBI Detour Viaduct fabrication continues in Korea and the first shipment has been received at the Port of San Francisco.
- Yerba Buena Island Transition Permanent
  Structures (YBITS) foundation work. Work on
  the foundation of W4L/R and W6 L/R is in
  progress. Caltrans and their contractor

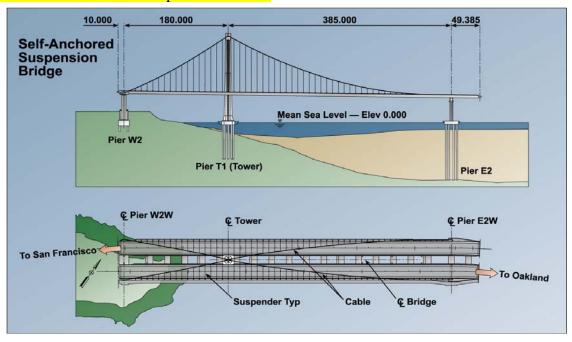


Overview of Upper Roadway Deck Replacement

successfully rolled into place the pre-cast replacement upper roadway deck section near the YBI tunnel as part of the West Tie-in Phase I. The work was completed 11 hours early during the full Bay Bridge closure over the Labor Day Weekend. These actions are significantly advancing the permanent SFOBB East Span structure construction on Yerba Buena Island to reduce risk to the SFOBB East Span Seismic Retrofitting Project.

- Project Oakland Touchdown (OTD) Submarine Cable contract was approved by Caltrans on January 11, 2007. The contract has replaced the existing submerged electrical cable from Oakland to Treasure Island. Additional non-program funding to support allocation beyond the \$9.6 million of available program funds has been made available by the Treasure Island Development Authority (TIDA). On January 11, 2007. All field work has been completed and the contractor has demobilized. Contract closeout is in progress.
- The SFOBB East Span Seismic Replacement Project Oakland Touchdown #1 (OTD #1) contract, which will construct the westbound approach structure from the toll plaza to the new

- Skyway and a significant portion of the eastbound approach structure, was awarded to MCM Construction on July 17, 2007. The first working day of the contract was August 22, 2007, with the Designated Portion of Work (Oakland Approach Structure Westbound) scheduled to be completed by June 1, 2009, and contract completion date of November 8, 2009. Based on an A & B contract requirement with a 650 plus 160, or 810 days contract duration, the contract completion date is November 8, 2009.
- In March 2007, the TBPOC approved a number of changes to the Yerba Buena Island Detour contract to better integrate the detour work into the current project schedule and to reduce overall project risks by advancing Yerba Buena Island Transition Structures (YBITS) foundation work into the YBI Detour contract. These changes increased the YBI Detour contract budget by \$202.5 million and decreased the YBITS contract by \$23.2 million. The net project increase will be funded from the existing program contingency and does not change the overall Toll Bridge Seismic Retrofit Program budget.



# **Program Overview**

Seven of the nine state-owned toll bridges were identified for seismic retrofit in the TBSRP:

- 1. Benicia-Martinez Bridge
- 2. Carquinez Bridge
- 3. San Mateo-Hayward Bridge
- 4. Vincent Thomas Bridge
- 5. San Diego-Coronado Bridge
- 6. Richmond-San Rafael Bridge
- 7.SFOBB (west span, west approach replacement, and east span replacement).

Seismic retrofit of these complex structures presents an extremely difficult engineering challenge and nowhere in the world has a bridge seismic safety program of this size been undertaken. Although the Dumbarton and the Antioch bridges were not included in the program, Caltrans is continuing to work on seismic vulnerability studies to assess the potential for necessary retrofit work on these structures. (See discussion on page 28).

As shown in *Table 1-TBSRP Project Status*, a significant portion of the TBSRP is complete. Only the SFOBB West Approach and new East Span Seismic Replacement projects remain to be seismically retrofitted.

The Third Quarter 2007 forecast for those projects indicates that they will be completed within the current TBPOC approved cost and schedule estimates. *Tables 2 and 3* on the following pages provide a summary of the cost, schedule, and status of all the TBSRP projects.

**Table 1-TBSRP Project Status** 

Toll Bridge Seismic Retrofit Projects	Seismic Safety Status
San Francisco-Oakland Bay Bridge East Span Replacement	Construction
San Francisco-Oakland Bay Bridge West Approach Replacement	Construction
San Francisco-Oakland Bay Bridge West Span Seismic Retrofit	Complete
San Mateo-Hayward Bridge Seismic Retrofit	Complete
Richmond-San Rafael Bridge Seismic Retrofit	Complete
Carquinez Bridge Eastbound Seismic Retrofit	Complete
Benicia-Martinez Bridge Seismic Retrofit	Complete
San Diego-Coronado Bridge Seismic Retrofit	Complete
Vincent Thomas Bridge Seismic Retrofit	Complete

# (To be Updated)

Table 2-Toll Bridge Seismic Retrofit Program—Cost Summary (\$Millions)

Project	Work Status	AB 144 / SB 66 Budget (07/2005)	Approved Changes	Current Approved Budget (08/2007)	Cost To Date (08/2007)	Cost Forecast*	At- Completion Variance	Cost Status
a	b	С	d	e = c + d	f	g	h = g - e	i
SFOBB East Span Replacement Project								
Capital Outlay Support		959.4	-	959.4	524.7	977.1	17.7	
Capital Outlay Construction								
Skyway	Construction	1,293.0	-	1,293.0	1,180.0	1,293.0	-	•
SAS E2/T1 Foundations	Construction	313.5	-	313.5	242.7	313.5	-	•
SAS Superstructure	Construction	1,753.7	-	1,753.7	286.9	1,767.4	13.7	•
YBI Detour	Design/Const	131.9	202.5	334.4	90.5	334.4	-	•
YBI Transition Structures	Design	299.3	(23.2)	276.1	-	276.1	-	•
Oakland Touchdown (OTD)		283.8	-	283.8	11.4	302.5	18.7	
* OTD Submarine Cable	Complete	-	-	-	7.4	9.6	-	•
* OTD No. 1 (Westbound)	Construction	-	-	-	4.0	226.5	-	•
* OTD No. 2 (Eastbound)	Design			-		62.0	-	•
* OTD Electrical Systems	Design	-	-	-	-	4.4	-	
Existing Bridge Demolition	Design	239.2		239.2		222.0	(17.2)	•
Stormwater Treatment Measures	Construction	15.0	3.3	18.3	13.5	18.3	-	•
East Span Completed Projects		90.3	-	90.3	89.2	90.3	-	
Right-of-Way and Environmental Mitigation		72.4	-	72.4	38.8	72.4	-	•
Other Budgeted Capital		35.1	(3.3)	31.8	0.6	7.7	(24.1)	
Total SFOBB East Span Replacement Project		5,486.6	179.2	5,665.8	2,478.3	5,674.7	8.9	
SFOBB West Approach Replacement	Construction							•
Capital Outlay Support		120.0	-	120.0	96.7	120.0	-	
Capital Outlay Construction		309.0	-	309.0	253.3	309.0	-	•
Total SFOBB West Approach Replacement		429.0	-	429.0	350.0	429.0	-	
Richmond-San Rafael Bridge Retrofit	Complete							•
Capital Outlay Support		134.0	(7.0)	127.0	126.6	127.0	-	
Capital Outlay Construction & Right-of-Way		780.0	(82.0)	698.0	666.5	698.0	-	
Total Richmond-San Rafael Bridge Retrofit		914.0	(89.0)	825.0	793.1	825.0	-	
Program Completed Projects	Complete							
Capital Outlay Support		219.8	-	219.8	219.4	219.8	-	
Capital Outlay Construction		705.6	-	705.6	698.1	705.6	-	
<b>Total Program Completed Projects</b>		925.4	-	925.4	917.5	925.4	-	
Miscellaneous Program Costs		30.0	-	30.0	24.7	30.0	-	
Program Contingency		900.0	(90.2)	809.8	-	800.9	(8.9)	
Total Toll Bridge Seismic Retrofit Program		8,685.0		8,685.0	4,563.6	8,685.0	-	

Within Approved Schedule and Budget

Ordential Cost and Schedule Impacts: Likely future need for Program Contingency Allocation

Known Cost and Schedule Impacts: Request for Program Contingency Allocation forthcoming
 Note: Details may not sum to totals due to rounding effects.

# To be Updated

Table 3-Toll Bridge Seismic Retrofit Program—Schedule Summary

Project	AB 144 / SB 66 Project Complete Baseline (07/2005)	Approved Changes (Months)	Project Complete Current Approved Schedule (08/2007)	Project Complete Schedule Forecast (08/2007)	Schedule Variance (Months)	Schedule Status	Remarks
a	b	С	d = b + c	е	f = e - d	g	h
SFOBB East Span Replacement Proje Skyway	ect Apr 07	8	Dec 07	Dec 07	-	•	See page 30.
SAS E2/T1 Foundations	Jun 08	(3)	Mar 08	Mar 08	-	•	
SAS Superstructure	Mar 12	12	Mar 13	Mar 13	-	•	See Note.
YBI Detour	Jul 07	36	Jun 10	Jun 10	-	•	See discussion on pages 17 and 18.
YBI Transition Structures	Nov 13	12	Nov 14	Nov 14	-	•	
Oakland Touchdown (OTD)	Nov 13	12	Nov 14	Nov 14	-	•	
OTD Submarine Cable	n/a		Jan 08	Jan 08	-	•	See pages 8 and19.
OTD Westbound	n/a		Jan 10	Jan 10	•	•	
OTD Eastbound	n/a		Nov 14	Nov 14	-	•	See Note.
Existing Bridge Demolition	Sep 14	12	Sep 15	Sep 15	-	•	See Note.
Stormwater Treatment Measures	Mar 08	-	Mar 08	Mar 08		•	
Open to Traffic Date: Westbound	Sep 11	12	Sep 12	Sep 12	-	•	See Note.
Open to Traffic Date: Eastbound	Sep 12	12	Sep 13	Sep 13		•	See Note.
SFOBB West Approach Replacement	Aug 09	-	Aug 09	Aug 09	-	•	
Richmond-San Rafael Bridge							
Seismic Retrofit	Aug 05	-	Aug 05	Oct 05	2	•	Seismic retrofit completed July 29, 2005. Formal acceptance of contract October 28, 2005. \$89 million has been transferred to
Public Access Project	n/a	-	May 07	Sept 07	4	•	Program Contingency. See page 30.

Note: Schedules for selected projects and the Open to Traffic dates were extended by 12 months from the AB 144/SB 66 baseline schedule due to Addenda #5 and #7 on the SAS Superstructure contract in response to bidder inquiries and to reduce costs.

# **Program Costs**

# **Baseline and Projected Budget**

The 2005 AB 144/SB 66 baseline budget is \$7.785 billion for CO and COS plus \$900 million in program contingency for a total baseline budget of \$8.685 billion. The Third Quarter 2007 forecast for the program remains steady at the \$8.685 billion budget. The Third Quarter 2007 forecast for the SFOBB East Span Project remains at \$5.675 billion, which includes a revised construction cost estimate on the OTD #1 and YBI Detour contracts.

Additional cost estimate and expenditure detail for the TBSRP are included in Appendices A-1 and A-2. The details of the cost estimates and expenditures for the SFOBB East Span are shown in Appendix B.



East Span Deck Replacement

# To be updated Table 4-Toll Bridge Seismic Retrofit Program Baseline (AB 144/SB 66) And Forecasts (\$ Millions)

Contracts	AB 144 / SB 66 Baseline Budget	Approved Changes	Current Approved Budget	2nd Quarter 2007 Forecast	Difference from Current Approved Budget
Completed Projects					
Benicia-Martinez	177.8	-	177.8	177.8	-
Carquinez	114.2	-	114.2	114.2	-
San Mateo-Hayward	163.5	-	163.5	163.5	-
Vincent Thomas	58.5	-	58.5	58.5	-
San Diego-Coronado	103.5	-	103.5	103.5	-
SFOBB West Span	307.9	-	307.9	307.9	-
Ongoing Projects					
Richmond-San Rafael	914.0	(89.0)	825.0	825.0	-
SFOBB West Approach	429.0	-	429.0	429.0	-
SFOBB East Span	5,486.6	179.2	5,665.8	5,674.7	(8.9)
Miscellaneous Program Costs	30.0	-	30.0	30.0	-
Subtotal	7,785.0	90.2	7,875.2	7,884.1	(8.9)
Program Contingency	900.0	(90.2)	809.8	800.9	8.9
Total Program	8,685.0	-	8,685.0	8,685.0	-

# **Program Schedule**

### **Baseline and Projected Schedule**

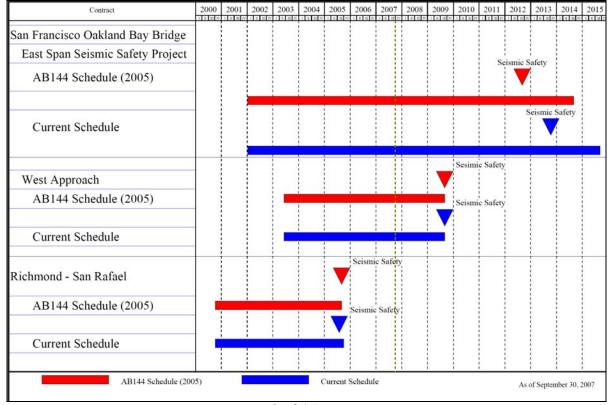
Seismic retrofit on six of the seven toll bridges in the TBSRP is complete. These structures include the Benicia-Martinez, Carquinez, Richmond-San Rafael, San Mateo-Hayward, Vincent Thomas, and San Diego-Coronado bridges. Seismic retrofitting of the SFOBB west span was completed in June 2004. The SFOBB West Approach and East Span Seismic Replacement projects are currently under construction. The current June 2007 schedule calls for achieving seismic safety and opening to traffic the SFOBB new east span in 2013.

The 12 months of schedule extension was granted by addendum to the SFOBB East Span Seismic Replacement Project SAS contract based on bidder inquiries received during advertisements. While the 12 month schedule extension for the SAS has also extended the schedules for YBITS and OTD contracts accordingly, Caltrans is scheduling the contracts to accommodate the possibility of early SAS completion-based incentives also included in the SAS addendum.

On the YBI Detour contract, the TPBOC has approved a forecast completion extension to 2010 to reduce overall program risks by advancing work from the YBITS contracts into the SSD contract. The extension will not impact the open-to-traffic date for the new east span and facilitate possibilities to accelerate opening of the new bridge.

It is estimated that all of the construction activities for the SFOBB East Span Seismic Replacement project will be completed by 2015, marked by the planned demolition of the existing SFOBB east span. *Chart 1-Toll Bridge Seismic Retrofit Program Schedule*, shows the baseline, AB 144/SB 66 project schedule versus the projected completion schedules for the TBSRP projects under construction.

Chart 1-Toll Bridge Seismic Retrofit Program Schedule Baseline AB 144/SB 66 vs. Projected Schedule



# **Program Funding and Financing**

AB 144 established a funding level of \$8.685 billion for the TBSRP. The bill specifies funding sources for the program, as shown in *Table 5-Program Budget*.

# To be updated

Table 5-Program Budget as of June 30, 2007 (\$ Millions)

		Funding Available &
	Budgeted	Contributions
Financing	2 292 0	2 292 0
Seismic Surcharge Revenue AB 1171	2,282.0	2,282.0
Seismic Surcharge Revenue AB 144	2,150.0	2,150.0
BATA Consolidation Subtotal - Financing	820.0 <b>5,252.0</b>	820.0 <b>5,252.0</b>
Contributions		
Proposition 192	790.0	789.0
San Diego Coronado Toll Bridge Revenue Fund	33.0	33.0
Vincent Thomas Bridge	15.0	6.9
State Highway Account <sup>(1)(2)</sup>	745.0	745.0
Public Transportation Account <sup>(1)(3)</sup>	130.0	90.0
ITIP/SHOPP/Federal Contingency	448.0	-
Federal Highway Bridge Replacement and Rehabilitation (HBRR)	642.0	500.0
SHA - East Span Demolition	300.0	
SHA - "Efficiency Savings" (4)	130.0	2.0
Redirect Spillover	125.0	
Motor Vehicle Account	75.0	75.0
Subtotal - Contributions	3,433.0	2,240.9
Total Funding	8,685.0	7,657.9
Allocated to date		6,017.3
Remaining Unallocated		1,640.6

<sup>(1)</sup> The California Transportation Commission adopted a new schedule and changed the PTA/SHA split on December 15, 2005.

Notes: Program budget includes \$900 million program contingency.

<sup>(2)</sup> To date, \$645 million has been transferred from the SHA to the TBSRP, including the full \$290 million transfer scheduled by the CTC to occur in 2005-06. An additional \$100 million has been expended directly from the account.

<sup>(3)</sup> To date, \$130 million has been transferred from the PTA to the TBSRP, including the full amount of all transfers scheduled by the CTC.

<sup>(4)</sup> To date, \$2 million has been transferred from the SHA to the TBSRP, representing the commitment of "Efficiency Savings" for 2005-06 identified under AB 144. Approximately \$128 million remains to be distributed as scheduled by the CTC.

# **Funding Status**

The program's financial status of revenues and expenditures is summarized in the table below, *Table 6-Toll Bridge Seismic Retrofit Program Financial Status*. The figures include the surcharge revenues collected, transfers from the SHA and the PTA, and expenditures from the Toll Bridge Seismic Retrofit Account (TBSRA) and the Seismic Retrofit Bond Act of 1996 (Proposition 192).

# To be updated

# Table 6-Toll Bridge Seismic Retrofit Program Financial Status as of June 30, 2007 (\$ Millions)

Revenues:	
Toll Surcharge <sup>(1)</sup>	687.9
SMIF Interest	97.9
Bond Revenue (Seismic Bond of 1996)	789.0
Bond Revenue (Toll Revenue Bonds)	1,062.0
Commercial Paper <sup>(2)</sup>	80.0
SANDAG	33.0
Vincent Thomas <sup>(3)</sup>	6.9
Federal Highway Bridge Replacement and Rehabilitation	500.0
Transfers to TBSRA:	
Motor Vehicle Account	75.0
State Highway Account <sup>(4)</sup>	745.0
Public Transportation Account <sup>(5)</sup>	90.0
State Highway Account "Efficiency Savings" (6)	2.0
Total Revenues and Transfers	4,168.7
Expenditures:	
Capital Outlay	3,483.6
State Operations	976.3
Total Expenditures	4,459.9
Encumbrances:	
Capital Outlay	1,551.8
State Operations	5.6
Total Encumbrances	1,557.4
<b>Total Expenditures and Encumbrances</b>	6,017.3

- (1) The Toll Surcharge is dedicated to repayment of bonds beginning September 1, 2003. Toll Surcharge shown here is only toll revenue collected prior to that date.
- (2) \$80 Million in Commercial Paper issued on or about April 5, 2005.
- (3) No additional funding is expected from the Vincent Thomas Toll Revenue Account.
- (4) To date, \$645 million has been transferred from the SHA to the TBSRP, including the full \$290 million transfer scheduled by the CTC to occur in 2005-06. An additional \$100 million has been expended directly from the account.
- (5) To date, \$130 million has been transferred from the PTA to the TBSRP, including the full amount of all transfers scheduled by the CTC.
- (6) To date, \$2 million has been transferred from the SHA to the TBSRP, representing the commitment of "Efficiency Savings" for 2005-06 identified under AB 144. Approximately \$128 million remains to be distributed as scheduled by the CTC.

# **Program Financing**

As discussed above, AB 144 consolidated the administration of all toll revenues collected on the state-owned Bay Area toll bridges and financing of the TBSRP under the jurisdiction of BATA. BATA has direct programmatic responsibilities for the administration of all toll revenues collected on the state-owned bridges in the Bay Area and responsibilities for financial management of the TBSRP program, including:

- Administrative responsibility for collection and accounting of all toll revenues.
- Authorization to increase tolls on the stateowned bridges by \$1.00 effective January 1, 2007.
- Project level toll-setting authority as necessary to cover additional cost increases beyond the funded program contingency in order to complete the TBSRP.
- Assumption of funding all of the roadway and bridge structure maintenance from Caltrans once bridge seismic retrofit projects are completed.

In accordance with its responsibilities provided under the law, in September 2005 BATA adopted a finance plan for the TBSRP. The major components of the finance plan include:

- Issuing \$6.2 billion in debt, including defeasance of \$1.5 billion in outstanding State Infrastructure Bank bonds and commercial paper.
- Increasing tolls on the state-owned bridges by \$1.00, (from \$3.00 to \$4.00 for two-axle vehicles), effective January 1, 2007.
- Securing the maximum amount of state funding early in the construction schedule to most efficiently use toll funds (see the following discussion concerning the CTC funding schedule).

• Locking in current interest rates to the extent possible in order to improve the chances that the entire toll program construction and the operations and maintenance can be delivered within the \$4.00 auto toll level.

In September 2005, BATA approved a Finance Plan for the TBSRP and other toll bridge improvement programs dependent on toll revenues from the state-owned bridges. The finance plan called for \$6.2 billion in new debt issuances, including defeasance of the existing outstanding I-Bank bonds. Consistent with the finance plan in December 2005, BATA approved the issuance of up to \$1.0 billion of 2006 toll bridge revenue bonds in February 2006. The bond issuance will provide adequate cash flow to fund the SAS contract for the East Span Replacement project, which was awarded on May 3, 2006.

Furthermore, in March 2006, BATA approved the issuance of \$1.2 billion in bonds to defease the I-Bank bonds approved in October 2005. Additionally, pursuant to the law, BATA held two public hearings- one in October and one in November 2005 - to receive public testimony regarding the proposed \$1.00 seismic surcharge toll increase beginning on January 1, 2007 on the stateowned toll bridges in the Bay Area. BATA approved the toll increase on January 25, 2006.

Pursuant to AB 144, on September 29, 2005, the CTC adopted a schedule - revised in December 2005 - for the transfer of state funds to BATA to fund the TBSRP. The schedule contains the timing and sources of the state contributions, which begin Fiscal Year (FY) 2005-06 and distributes the contributions over the years of project construction to ensure a timely balance between state sources and the contributions from toll funds. In December 2005, the CTC re-adopted the schedule to reflect opportunities to maximize the use of available PTA funds and correct prior transfer transactions. The CTC's December 2005 revised schedule for the transfer of funds allows BATA to pledge the state fund contribution to the financing of the TBSRP per



West Approach

BATA's adopted finance plan. The CTC schedule is included in Appendix C.

In March 2007, BATA approved the issuance of \$825 million in 2007 Toll Bridge Revenue Bonds. The financing will be used primarily to fund seismic retrofit projects. Upon issuance of the 2007 bonds, BATA's debt total will be \$4.9 billion.

# **Project Status**

# **Ongoing Construction Projects**

# **SFOBB West Approach**

The SFOBB West Approach Seismic Retrofit Project will remove and replace the west approach to the SFOBB, which includes all of the westbound mainline and most of the eastbound mainline from 4<sup>th</sup> Street to the SFOBB west anchorage, and all of the connecting entrances and exit ramps in downtown San Francisco. The construction work, which began in June 2003, is approximately 84 percent complete. Completion of this project is scheduled for 2009.

Upon completion of the retrofit project, the west approach mainline and ramps will have the same number of traffic lanes as before, but with improved highway geometrics. The mainline eastbound and westbound structures will be adjacent to each other

at 4<sup>th</sup> Street and transition to a double-deck configuration with their own independent support system from Rincon Hill to the anchorage in order to tie into the existing SFOBB.

# **Milestones Achieved**

The San Francisco-Oakland Bay Bridge (SFOBB) West Approach Project is 84 percent complete as of September 20, 2007 and is on schedule to finish in August 2009. The Harrison off Ramp deck was completed in July 2007 and its falsework removed in August 2007. Major ongoing work during this quarter includes rebuilding of the new EB 80 structure, with column installation continuing throughout the summer and with falsework installation to follow. An extensive public outreach effort continues and will be necessary until the spring of 2008 for the construction of the EB80 adjacent to Stillman Street area. Frame 7U temporary supports and falsework will continue through September 2007 and work on Frame 6U has commenced during this report period.

# **Project Funding**

The AB 144/SB 66 baseline budget totals \$429 million for the project with \$309 million for CO and \$120 million for COS. See *Table 7-Baseline and Estimated Budget Need for SFOBB West Approach* 

Table 7-Baseline and Estimated Budget Need for SFOBB West Approach (\$ Million)

	AB 144/ SB 66 Budget	2nd Quarter 2007 Forecast	Difference
COS	120.0	120.0	-
СО	309.0	309.0	-
Total	429.0	429.0	-

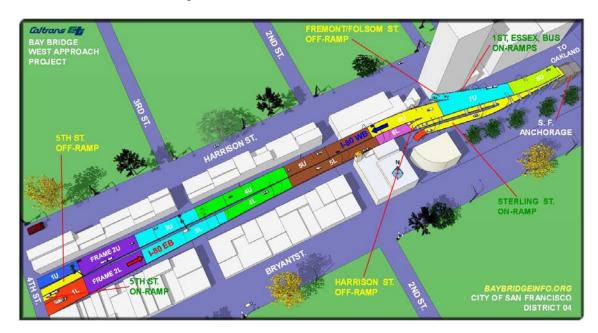
# **Major Risk Issues**

Caltrans' West Approach Risk Response Team is continuing with its efforts to manage project risks. Updated risk assessments have been regularly performed during the Third Quarter as a standard project management practice.

Lessons learned to this point in the project continue to be important aspects of the implementation plans designed to mitigate risk, for example:

- The aggressive informational campaigns have proven successful in keeping the public fully informed of upcoming demolition operations that would affect traffic, thereby mitigating adverse public perception. Regional and local information campaigns were launched during spring 2007 to proactively address public concerns related to upcoming work on the interim eastbound detour and subsequent demolition work.
- Equipment and labor resources were increased during low traffic times such as nights and weekends. This strategy reduced inconveniences to the surrounding residents and

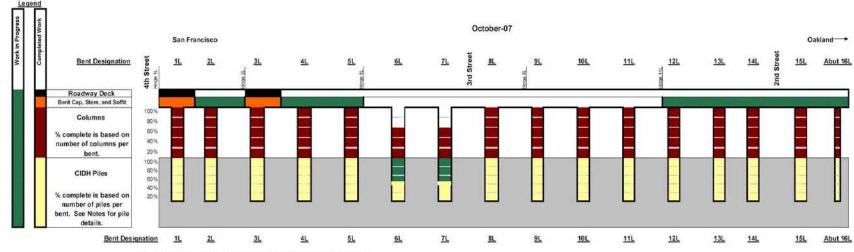
- businesses and minimized impact to the regional motorists while maintaining the level of production required for the project to remain on the target schedule.
- A high-priority risk issue currently being addressed by Caltrans concerns investigation and testing for the identification of pile anomalies that must be completed timely so as to avoid construction impact. To respond to this risk, Caltrans Construction staff coordinates closely with Structure Design and Caltrans Material Engineering and Testing Service (METS) staff daily on pile investigation and testing issues, and proactively monitors this effort. Tracking of the testing effort is done at the individual pile level of detail. Team participation in Risk Management meetings has proven to be valuable in addressing this issue.



West Approach New I-80 Eastbound Westbound Model (Under Construction)

# 2007 Third Quarter Report - Toll Bridge Seismic Retrofit Program

### SFOBB West Approach Retrofit Progress Diagram Mainline Eastbound 80 Rebuilding



Notes: 1. Bents 1L and 2L each have 5 - 84" Cast In Drilled Hole (CIDH) piles.

2. Bents 3L through 5L each have 5 - 90" Cast In Drilled Hole (CIDH) piles.

3. Bents 6L through 8L each have 4 - 90" Cast In Drilled Hole (CIDH) piles.

Bents 9L through 15L each have 3 - 72" Cast In Drilled Hole (CIDH) piles.
 Abutment 16L has 18 - 30" Cast In Drilled Hole (CIDH) piles.

6. Average Pile lengths are as follows:

Bents 1L through 3L = 90°.

Bent 4L = 75" Bent 5L = 80°

Bents 6L through 8L = 75°

Bent 9L = 60' Bent 10L = 70'

Bents 11L and 12L = 73°

Bent 13L = 70'

Bents 14L and 15L = 67

Abutment 16L = 40'

7. Items of work this chart does not include:

Lower Deck Retrofit

Sterling on-ramp reconstruction

# SFOBB East Span Seismic Replacement

The SFOBB East Span Seismic Replacement project will be seismically retrofitted through the complete replacement of the existing span. The project includes construction of the Skyway portion of the bridge (See SFOBB East Span Replacement Project table below), which consists of two parallel concrete structures, each approximately 1.3 miles in length; an SAS bridge consisting of a 510-foot tower supporting a bridge deck connecting the Skyway bridge to YBI, transition structures on YBI and on the east end of the bridge connecting to the toll plaza area, and demolition of the existing east span.

The SFOBB East Span Project now consists of 21 contracts. Construction of the Oakland Touchdown (OTD) Approach Structures and the Yerba Buena Island Transition Structures

(YBITS) has been split into multiple contracts to facilitate construction flow and acceleration of work elements off the critical path for the completion of the new east span.

The current 21 SFOBB east span contracts are identified on the following pages: Eight contracts are **complete**:

- Interim Retrofit (Existing Bridge)
- East Span Retrofit (Existing Bridge)
- Pile Installation Demonstration
- OTD Geofill
- YBI Archaeology
- United States Coast Guard (USCG) Road Relocation on YBI
- SAS Land Foundations (W2)
- YBI Electrical Substation

### To be updated

Table 8-SFOBB East Span Seismic Replacement Project Schedule Summary

Contract	AB 144/SB 66 Baseline Pro	Approved Changes	Current Approved Schedule	2nd Quarter 2007 Forecast Project Completion Date	Variance (Months)
Skyway	April 2007	8	December 2007	December 2007	-
YBI Detour*	July 2007	36	June 2010	June 2010	-
Stormwater Treatment Measures	March 2008	-	March 2008	March 2008	-
SAS E2/T1 Foundations	June 2008	(3)	March 2008	March 2008	-
Open to Traffic: Westbound	September 2011	12	September 2012	September 2012	-
SAS Superstructure	March 2012	12	March 2013	March 2013	-
Open to Traffic: Eastbound	September 2012	12	September 2013	September 2013	-
Oakland Touchdown (OTD)	December 2013	12	December 2014	December 2014	-
OTD Submarine Cable	n/a		January 2008	January 2008	-
OTD No. 1 (Westbound)	n/a		January 2010	January 2010	-
OTD No. 2 (Eastbound)	n/a		November 2014	November 2014	-
YBI Transition Structure*	December 2013	12	November 2014	November 2014	-
Existing Bridge Demolition*	September 2014	12	September 2015	September 2015	-

Note: The new east span forecast to be fully open to traffic in September 2013. Construction activities will continue beyond that date to complete the project, including demolition of the existing structure.

Seven contracts are under **construction**: Note that percent complete figures for construction contracts are based on actual payments made divided by the contract amount.

- Skyway contract (98 percent complete)
- The YBI Detour (61 percent complete)
- SAS Marine Foundations (E2/T1) (89 percent complete)
- SAS (21 percent complete)
- Stormwater Treatment Measures (92 percent complete)
- OTD Submarine Cable Relocation (99 percent complete)
- OTD #1 contract (3% percent complete)

### Six contracts are in design:

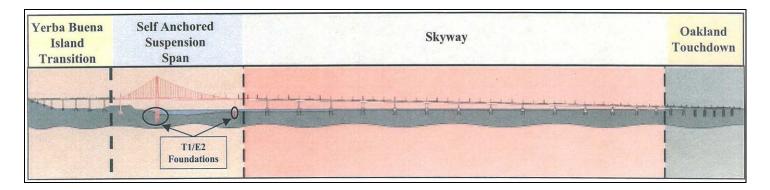
- OTD #2 contract: The contract is planned to be advertised in summer 2010
- OTD portions of the corridor electrical contract: This scope may be executed as a separate contract, or alternatively, may be included within OTD #2 contract and/or the other contracts within the east span corridor.
- YBITS #1 (design 90 percent complete to date)
- YBITS #2 (design 80 percent complete to date)
- YBITS #3 contract

• Existing Bridge Demolition design (10 percent complete to date)

The forecast completion date as compared to the AB 144/SB 66 baseline completion date for each of the major components of the SFOBB East Span Seismic Replacement project is shown in *Table 8-SFOBB East Span Seismic Replacement Project Schedule Summary* on page 15.

The approved East Span opening date has been extended by 12 months by the TBPOC through addendum issued on the SAS contract based on bidder inquiries received during advertisement. The current approved schedule does not include the potential for schedule reduction based on an early completion incentive on the SAS contract of six months that was also included in the addendum.

The completion of the Skyway contract has been revised from April 2007 to December 2007 as approved by the TBPOC due to a Contract Change Order executed with the Contractor that resolves a variety of construction issues. The schedule for the YBI Detour contract has been extended to take into account the 12-month change to the SAS contract schedule and the incorporation of additional work scope from the YBITS contract. This extension is not expected to impact the new east span open-to-traffic date.



SFOBB East Span Replacement Project

### Milestones Achieved – East Span Contracts

- The Skyway contract is 98 percent complete as of September 2007. The eastbound and westbound structures are 100 percent complete with the erection of all 452 segments. The two hinge pipe beams at location E eastbound were installed.
- An overall settlement has been reached with the Contractor to resolve all cost and schedule impacts posed by claims related to hinge pipe beam fabrication, service platforms, electrical appurtenances, polyester concrete overlay, modular joints and other tasks to be completed that were known as of August 1, 2006. A time extension of 220 working days, extending the project completion date to December 2007 has been approved by the TBPOC. The change in schedule to the Skyway contract will not delay the open-to-traffic date for the new East Span project, nor will this settlement negatively impact the overall budget for the Skyway contract or the project. Various Notices of Potential Change (NOPCs) have been issued by the Contractor on behalf of their Steel Orthotropic Box Girder (SOBG) fabrication subcontractor concerning issues related to that work scope that has been completed. All of these NOPCs have been heard by the Dispute Review Board.
- The E2/T1 contract is 89 percent complete as of September 2007. At the East Pier (E2), foundation pile driving has been completed. Caltrans and their contractor have completed most of the eastbound E2 foundation and column. Interior concrete at E2W footing is in progress. Rebar cage assembly is complete for the E2W column. At the Tower Pier (T1), all steel foundation casings have been fabricated. All 13 rock sockets that tie the SAS tower foundation (T1) to bedrock have been installed. The T1 footing box was delivered and installed at the project site on March 17, 2007. The lightweight (LW) concrete has been placed in

- the inner cells of E2E. Rebar for the footing wall is in progress.
- The SFOBB East Span Seismic Replacement Project SAS Superstructure contract is 21 percent complete based on payments to the Contractor as of September 2007. Development of various administrative submittals, including schedule updates, is continuing. The Contractor has finalized agreements with various manufacturers, fabricators, suppliers and subcontractors, including Zhenhua Port Machinery Company (ZPMC), of Shanghai, China, to supply and fabricate all the major steel structures in the SAS. Caltrans is working to set up facilities and to organize resources in China that will ensure an effective Owner's presence in the steel fabrication shops operated by ZPMC. ABF has completed the design of the crane barge to be used to lift the heavy tower and deck sections. Barge fabrication is on going in Oregon. Civil construction work has started at the W2 foundation with falsework for the pier table. The fabricators for the temporary towers and trusses have been selected by the contractor and fabrication is underway. Caltrans is also taking risk mitigation measures to address potential issues during construction due to structural steel plate conflicts and welding methods.

### **Yerba Buena Island Contracts**

- For the Yerba Buena Island Detour (YBID) contract, Caltrans and its consultants have assumed design responsibilities from the Contractor for the design of the East and West tie-ins from the existing bridge and tunnel to the detour structure. Completion of their design is being managed by Caltrans and is to be completed in conjunction with the SAS schedule to minimize impacts to the traveling public. The viaduct segment is being fabricated in South Korea and the first shipment has arrived at the Port of San Francisco.
- Caltrans and their contractor successfully rolled into place the precast replacement upper

roadway deck section near the YBI tunnel as part of the West Tie-in Phase I. The work was completed 11 hours early during the full Bay Bridge closure over the Labor Day Weekend.

- The YBITS #1 contract will construct structures necessary to connect the new SAS to the existing YBI tunnel. To minimize schedule and construction risk, TBPOC approved the option to accelerate portions of YBITS #1 work, including shifting critical path work to the YBID contractor. The YBITS foundation work was added to the YBID contract because foundation work is always the highest risk element of structure construction. Early construction of the foundations would significantly reduce risk to the east span corridor schedule. Preparation of final PS&E packages is currently underway.
- As part of the YBI Advanced work, which was added to the YBID contract, work is continuing on the foundations and columns of W4 L&R and W6 L&R.

- A need was identified to accelerate work on pier W3L due to the SAS contractor need for access to that area. The YBI Detour contractor, CC Myers, completed that work and the SAS contractor has been granted access to that area ahead of schedule.
- The YBITS #2 contract includes demolition of the YBI Detour temporary structure, completion of the new eastbound on-ramp, completion of the bike path section on YBI and reconstruction of local and affected facilities at YBI. Eastbound traffic will be placed on the new structure in this contract. The majority of the design work is complete. Preparation of detailed plans and quantity calculations are in progress. The decision on the accelerated work will impact design work on this contract.
- The YBITS #3 contract is for landscaping, and includes slope restoration, vegetation restoration and plant maintenance for the areas affected by YBI construction. A planting concept and preliminary plans have



East Span Demolition

been developed for a majority of the area. Determination of the extent of the U.S. Coast Guard area to be landscaped is still pending. Development of the final plans has not been completed.

### **Oakland Touchdown Contracts**

- The OTD Submarine Cable contract will replace the existing submarine electrical cable from Oakland to Treasure Island. The cable relocation contract will place a new electrical cable(s) between the East Bay and Treasure Island because the existing electrical cable providing power to the island is close to foundation work necessary for the construction of the OTD #1 contract, which was advertised in February 2007. All field work has been completed and the contractor has demobilized. Contract closeout is in progress.
- The OTD #1 contract includes construction of all of the marine foundations, westbound bridge section and roadway approach for the section that connects the new Skyway portion to the roadway west of the Oakland Toll Plaza. Caltrans awarded the contract to MCM Construction on July 17, 2007. The first contract day of the project is August 22, 2007, with the completion of the "Designated Portion of Work (Oakland Approach Structure – Westbound)" scheduled on June 1, 2009, and contract completion by November 8, 2009. The contract will include workaround specification language to minimize risks from a delayed submarine cable contract. Field work has just been started with the conditional approval of the SWPPP by the Regional Quality Control Board, and the Contractor has driven test piles and delivered soldier and sheet piles to the site.
- The OTD #2 contract includes construction of the remaining eastbound bridge section and roadway approach for the section that connects the new Skyway portion to the

- roadway west of the Oakland Toll Plaza. This work will occur once the westbound traffic is shifted onto the new SAS. Design work for the structures portion of the OTD #2 contract is substantially complete. Design work on the roadway portion is ongoing.
- A fourth contract could incorporate most of the electrical elements from OTD, as well as from other segments of the east span into a single contract and is currently being scoped. The inclusion of this work into another existing contract is also being considered.

### **Other Contracts**

The Stormwater Treatment Measures contract is 92 percent complete as of September 2007 The Stormwater Project was required as part of the environmental mitigation package for the SFOBB Seismic Safety Project by the Regional Water Quality Control Board. The project will reduce the concentration of stormwater runoff pollutants including industrial chemicals, asbestos from brake pads, hydrocarbons, and heavy metals, from entering into the adjacent Emeryville Crescent. The Emeryville Crescent is a 558acre tidal marsh and cove that supports up to 14,000 shorebirds and thousands of other birds including the endangered clapper rail, which nests and forages in the vegetative cover of the marsh. This area has been described as supporting the largest number of shorebird species regularly occurring at one place within San Francisco Bay (Bodega Bay Institute, 1978). The project will provide water treatment of at least 85% of the average annual runoff from a 155-acre shed area in the vicinity of the SFOBB Toll Plaza. By removing toxins from the SFOBB runoff, Caltrans will enhance the habitat quality of the Emeryville Crescent and by extension, the San Francisco Bay. Current work includes construction of the Bioretention basis, completion of the drainage systems along Emeryville crescent area, shoulder paving on WB 80 from Powell St. on ramp west towards Maritime off ramp, electrical work for pump stations, and highway lighting.

Design on the Existing Bridge Demolition contract is 10 percent complete. Design work has been temporarily suspended to assign engineering resources to higher priority tasks, and will resume at a later time. The contract schedule completion date has been extended by 12 months due to a 12-month SAS contract extension.

### **Project Funding**

## Baseline and Projected Budget and Schedule

The AB 144/SB 66 baseline budget for the SFOBB east span is \$5.486 billion with \$4.527 billion for CO and \$959.4 million for COS. The current approved budget for SFOBB east span is \$5.666 billion with \$4.707 billion for CO and \$959.4 million for COS. This amount does not include program

contingencies. See *Table 9-SFOBB East Span Replacement Cost Summary*.

The TBPOC re-evaluates project and contract cost forecasts continuously. The estimate-at-completion as of March 31, 2007, includes revised forecasts from AB 144/SB 66 budget, as follows:

- A forecast increase in the cost of COS to \$977.1 million as a result of a detailed staffing and consultant contract cost forecast completed as of the end of the First Quarter 2007. This forecast includes considerations of revised and increased construction contract schedules as mentioned elsewhere in this report that require coverage by staff and consultants.
- A forecast \$13.7 million increase for the SAS Superstructure contract to cover actions taken to encourage additional bidders for the project, including the bidder's stipend for the

**Table 9-SFOBB East Span Replacement Cost Summary (\$ Millions)** 

### To be updated

Contract	AB 144/SB 66 Budget	Approved Changes	Current Approved Budget	Cost To Date (06/2007)	2nd Quarter 2007 Forecast	Variance
a	b	С	d = b + c	е	f	g = f - d
Capital Outlay Support	959.4	-	959.4	511.1	977.1	17.7
Capital Outlay	-	-	-	-	-	-
Skyway	1,293.0	-	1,293.0	1,164.6	1,293.0	-
SAS E2/T1 Foundations	313.5	-	313.5	230.1	313.5	-
SAS Superstructure	1,753.7	-	1,753.7	275.1	1,767.4	13.7
YBI South/South Detour	131.9	202.5	334.4	61.1	334.4	-
YBI Transition Structures	299.3	(23.2)	276.1	-	276.1	-
Oakland Touchdown	283.8	-	283.8	1.6	302.5	18.7
OTD Submarine Cable				1.6	9.6	
OTD Westbound				-	226.5	
OTD Eastbound				-	62.0	
OTD Electrical Systems				-	4.4	
Existing Bridge Demolition	239.2	-	239.2	-	222.0	(17.2)
Stormwater Treatment	15.0	3.3	18.3	11.5	18.3	-
East Span Completed	90.3	-	90.3	89.3	90.3	-
Right-of-Way and	72.4	-	72.4	38.8	72.4	-
Other Budgeted Capital	35.1	(3.3)	31.8	0.6	7.7	(24.1)
TOTAL	5,486.6	179.2	5,665.8	2,383.8	5,674.7	8.9

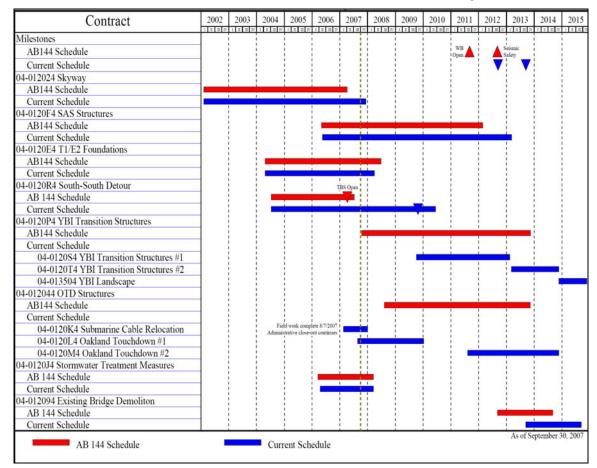
Note: Details may not sum to totals due to rounding effects.

lowest three responsive bidders.

- A forecast \$18.7 million increase in the CO for the OTD contract due to an approved Engineer's Estimate for the OTD #1 contract. The COS for the contract was also increased to cover the additional work to split the contract and to administer four separate contracts over a longer duration rather than the original single contract.
- A forecast \$17.2 million decrease for the Bridge Demolition Contract due to a reevaluation of the cost escalation rates for the project.
- All of the variances discussed above can be funded from a combination of other budgeted capital and Toll Bridge Seismic Retrofit Program Contingency. The forecast for the SFOBB east span has increased by \$8.9

- million to \$5.675 billion.
- The current June 2007 schedule calls for achieving seismic safety and opening to traffic the SFOBB new east span in 2013. The 12 months of schedule extension was granted by addenda to the SFOBB East Span Seismic Replacement Project SAS contract based on bidder inquires received during advertisements.
- In March 2007, the TBPOC approved a number of changes to the YBI Detour contract to better integrate the detour work into the current project schedule and to reduce overall project risks by advancing YBITS foundation work into the SSD contract. These changes increased the overall YBI Detour contract budget by \$202.5 million and decreased the YBITS contract by \$23.2 million.

Chart 2-San Francisco-Oakland Bay Bridge East Span Corridor Schedule Baseline AB 144/SB 66 vs. Current Projected





SAS - W2 Bent Cap

 While the 12 month schedule extension for the SAS has also extended the schedules for YBITS and OTD contracts accordingly, Caltrans is scheduling the contracts to accommodate the possibility of an early SAS completion based on incentives also included by the SAS addenda.

For the YBI Detour contract, the amount of delay to this contract is yet to be fully determined and is subject to analysis by Caltrans and negotiation with the Contractor. This delay is not expected to impact the open-to-traffic for the new east span.

It is estimated that all of the construction activities for the SFOBB East Span Seismic Replacement project will be completed by 2015.

The comparison of the AB 144/SB 66 baseline schedule and the current projected schedule is shown in *Chart 2-SFOBB East Span Corridor Schedule, Baseline AB 144/SB 66 vs. Current Projected* on page 22. It should be noted that the schedules shown in *Chart 2* do not at this time account for the potential "worst-case" issues that may affect the schedule identified in the SFOBB East Span Seismic Retrofit Project Risk Management Plan.

### 507 Third Quarter Report – Toll Bridge Seisilic Retrofit Pro

**Major Risk Issues** 

### SFOBB East Span Project Replacement Risk Management Plan

Caltrans continues to implement comprehensive risk management on all SFOBB East Span Seismic Replacement Project contracts in accordance with AB 144. Currently, Caltrans and BATA have embarked on an initiative to manage risk jointly. Risk response efforts continue to focus on encouraging responsive bids for future contracts and mitigating the estimated cost/schedule impact of identified risks. See "Risk Management Program" on page 27 for more information.

### **Quarterly Environmental Compliance Highlights**

SFOBB east span environmental tasks for the current quarter are focused on mitigation monitoring. All weekly, monthly, and annual compliance reports to resource agencies have been delivered on time with no comments from receiving agencies. Key successes this quarter are as follows:

- Bird monitoring was conducted weekly in the active construction areas. In addition,
   American peregrine falcon and California clapper rail nest monitoring occurred. The
   East Span peregrine falcon pair successfully hatched two eggs on or about April 21, 2007.
   On May 15, biologists from the Santa Cruz
   Predatory Bird Research Group (SCPBRG)
   removed the two nestlings from the Pier E3
   site. The nestlings, one male and one female,
   were taken to the SCPBRG facility for rearing and eventual release. The rationale for
   removing the nestlings was that they would have a low probability of successfully
   fledging from the Pier E3 site.
- Turbidity monitoring was conducted without incident in April during pile clean out at Pier E2 and in June during excavation on Treasure

Island and at the Oakland Mole for the Navy submarine cable replacement project.

- Monitoring for herring spawning activity within the project construction limits began in December and will continue through March 31 each year. Physical monitoring in January 2007 during pile-drilling and decanting activities at Pier 1 did not detect any herring spawning within 200 meters of Caltrans construction operations.
- Environmentally Sensitive Area (ESA) buoys have been placed in the vicinity of Treasure Island to protect eelgrass from construction activities for the Navy submarine cable project.
- On June 11, 2007, Caltrans submitted Amendment No. 17 to the San Francisco Bay Conservation and Development Commission (BCDC), requesting that the permit be amended to allow for an additional year of eelgrass monitoring at the North Basin eelgrass pilot program site. An additional year of monitoring will enable Caltrans to better assess the feasibility of continuing restoration efforts. Amendment No. 17 also requests a one-year time extension for commencement of hazardous waste and infrastructure removal at Skaggs Island. Currently, the United States Fish and Wildlife Service is in the process of procuring a Scope of Work and cost estimate for projected cleanup activities. Caltrans anticipates that the ensuing Scope of Work will facilitate the commencement of removal and cleanup activities on Skaggs Island by August 1, 2008; subsequently, Caltrans is requesting a one-year extension for initiation of these activities to August 1, 2008. The extension does not affect the overall cost or schedule of the East Bay extension project.

### **Completed Projects**

Seismic retrofit and project close-out has been completed on the Benicia-Martinez, Carquinez, San Mateo-Hayward, Vincent Thomas, San Diego-Coronado toll bridges and on the west span of the SFOBB. See Table 10-Cost Comparison AB 144/SB 66, Third Ouarter 2007 Forecast and Expenditures through September 2007 for Completed Projects on the following page. The Richmond-San Rafael Bridge project expenditures have not been completely closed because Caltrans is in discussions with regulatory agencies regarding potential mitigations for impacts on fish in the project area. Caltrans awarded a contract for the construction of a public access lot on the Marin side of the Richmond-San Rafael Bridge to comply with a Bay Conservation and Development Commission (BCDC) permit condition.



East Span Project

discussions with regulatory agencies regarding potential mitigations for impacts on fish in the project area. Caltrans awarded a contract for the construction of a public access lot on the Marin side of the Richmond-San Rafael Bridge to comply with a Bay Conservation and Development Commission (BCDC) permit condition. The Richmond-San Rafael Public Access Project will provide public access to the Bay shoreline at the north end of the Richmond-San Rafael Bridge in Marin County. This contract was completed in August 2007 and the lot was opened to public use.

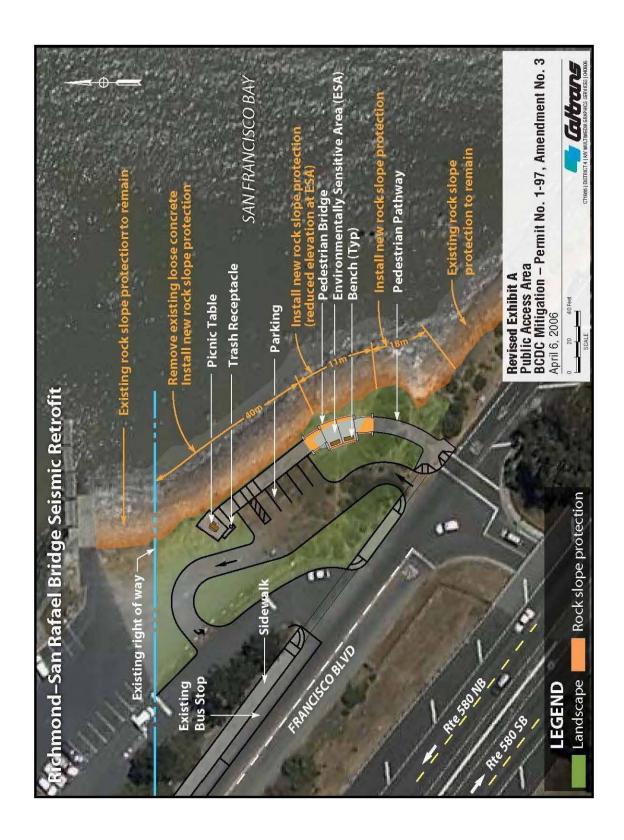
To close out the Richmond-San Rafael Seismic Retrofit Project, Caltrans faces potential exposures concerning the environmental mitigation for negative impacts on fish, which is currently being discussed with regulatory agencies. Final savings for the Richmond-San Rafael Bridge project will be based on the resolution of pending negotiations with environmental permitting agencies regarding the cost of pile driving mitigation. Initial project cost savings in the amount of \$89 million have been transferred to the Toll Bridge Seismic Retrofit Program Contingency, as directed by the TBPOC.

Table 10-Cost Comparison AB 144/SB 66, Second Quarter 2007 Forecast and Expenditures through June 30, 2007 for Completed Projects (\$ Millions)

### To be updated

Project	AB 144/ SB 66 Budget	Approved Changes	Current Approved Budget	Cost To Date (06/2007)	2nd Quarter 2007 Forecast	Variance
a	b	С	d = b + c	е	f	g = f - d
San Francisco-Oakland Bay Bridge West Span Seismic Retrofit Project	307.9	-	307.9	301.1	307.9	-
Carquinez Bridge Retrofit Project	114.2	-	114.2	114.2	114.2	-
Benicia-Martinez Bridge Retrofit Project	177.8	-	177.8	177.8	177.8	-
San Mateo-Hayward Bridge Retrofit Project	163.5	-	163.5	163.4	163.5	-
Richmond-San Rafael Bridge Retrofit Project	914.0	(89.0)	825.0	792.6	825.0	-
Vincent Thomas Bridge Retrofit Project	58.5	-	58.5	58.4	58.5	-
San Diego-Coronado Bridge Retrofit Project	103.5	-	103.5	102.6	103.5	-
TOTAL	1,839.4	(89.0)	1,750.4	1,710.1	1,750.4	-

Note: Details may not sum to totals due to rounding effects. Capital Outlay Support and Capital Outlay have been combined. Although seismic retrofit of the Richmond-San Rafael and San Diego-Coronado bridges are complete, environmental mitigation/monitoring work is still ongoing.



### **DRAFT**

### Risk Management Program

The following is a summary of risk management developments during the Third Quarter of 2007.

### **Corridor Schedule**

The Corridor Schedule Team (CST) continues to identify ways to enhance completion dates while providing recommendations to program management on scheduling decisions and mitigating potential schedule risks. The CST evaluates opportunities, risks, and uncertainties in corridor schedule activities as input in the quantitative corridor schedule risk analysis. To date, the CST has provided recommendations that have streamlined many of the contract tasks, realized opportunities, and reduced risks to the corridor schedule.

Of note is the early completion of installation on the new viaduct at Yerba Buena Island over the Labor Day weekend. The CST worked closely with the contractor to optimize schedule opportunities to construction operations on that weekend, and to ensure that equipment and plans were in place to deal with any contingencies. With work limited to three days, it was essential that there be a high confidence level that work could be completed in that timeframe. The contractor finished the work 11 hours ahead of schedule.

# Corridor Schedule Opportunity and Risk Response

Ongoing corridor schedule opportunity and risk analysis refines the probability of meeting key milestones. Preliminary analysis indicates that the corridor schedule is most sensitive to the opportunities and risks identified in Figure 1.

While schedule opportunity and risk analysis is ongoing, Caltrans assesses initial results to prioritize response actions. Opportunity and risk response focus teams have been formed to address six critical schedule risk areas:

 Self-Anchored Suspension (SAS) Tower and Deck Fabrication

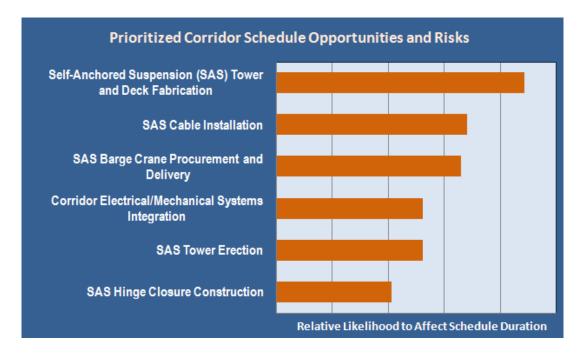


Figure 1. Prioritized Corridor Schedule Opportunities and Risks

- SAS Cable Installation
- SAS Barge Crane Procurement and Delivery
- Corridor Electrical/Mechanical Systems Integration
- SAS Tower Erection
- SAS Hinge Closure Construction.

The teams are charged with formulating and implementing opportunity and risk response strategies in these areas.

### **Adequacy of Program Reserves**

AB144 states that Caltrans must "regularly reassess its reserves for potential claims and unknown risks, incorporating information related to risks identified and quantified through its risk assessment processes."

Each contract has a contingency allowance within

its budget. The sum of these contingency allowances is compared to the total of capital outlay, capital outlay support and program risks. Any excess of the risks over the contingency allowances represents a potential draw on the Program Contingency (the reserve). As of the end of the second quarter 2007, the potential draw on Program Contingency ranges from about \$100 million to \$350 million, as shown in the diagram below. As the draw value increases, the probability of a greater draw decreases. The entire range of the potential draw curve is much less than the \$809.8 million Program Contingency balance in the TBPOC Q1 2007 Approved Budget, indicating that the reserve is adequate as of the end of the second quarter 2007.

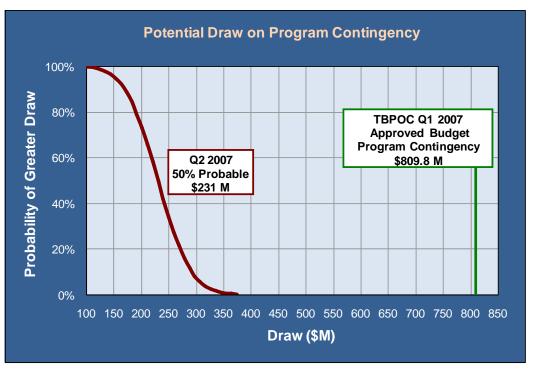


Figure 2. Potential Draw on Program Contingency

# Major Risk Management Accomplishments

### **Team China**

Earlier in 2007 Caltrans investigated several fabrication and quality assurance concerns during visits to the SAS fabrication facilities in China. In an effort to mitigate these concerns, Caltrans formed "Team China". The team is comprises experts from Design, Construction and Material Engineering and Testing Services (METS). Team China is tasked with monitoring machines, information, manpower, materials and the fabrication environment to resolve any issues locally and to ensure that tower and deck sections shipped to the Bay Area will conform to specifications and standards before they leave the facility.

### New Power Cable Contract Completed Early

Installation of the new power cable from Oakland to Treasure Island was completed ahead of schedule. Caltrans focused risk mitigation efforts on ensuring that the cable would arrive on site in time to meet a critical environmental schedule window of opportunity to lay submarine cable in the Bay.



### **Other Toll Bridges**

### **Dumbarton and Antioch Bridges**

State Route 84 crosses the southern region of San Francisco Bay between the cities of Newark to the

east and East Palo Alto to the west. The Route consists of three lanes in each direction and an eight-foot bicycle/pedestrian lane. The AADT of the Route is near 81,000. The bridge is over 2 km in length and is positioned in an approximately normal geometry between two seismic faults which the USGS has reported to pose most of the significant seismic threat to the San Francisco Bay Area: the San Andreas Fault, some 15 km to the west of the bridge; and the Hayward Fault, some 13 km to the east of the bridge.

State Route 160 crosses the San Joaquin River between the city of Antioch and Sherman Island (leading to Rio Vista) via the Antioch Bridge. The Bridge carries a single lane of traffic in each direction. The AADT for the Route is slightly over 13,000 vehicles per day. The bridge is threatened by the Bird's Landing Seismic Zone, Cost Range/Sierra Nevada Boundary Zone and the San Andreas Fault.

### **Cost and Schedule**

A preliminary cost estimate, schedule, and an initial risk analysis have been developed to complete a comprehensive seismic analysis for each bridge. In June 2006, BATA approved \$17.8 million in funding to proceed with the comprehensive seismic analysis of the bridges. The current forecast of expenditures is within the \$17.8 million budgeted.

In September 2006, BATA entered into contract with a geotechnical and geophysical consultant to evaluate the bridges. In April 2007, the field-drilling program was completed and the majority of the laboratory testing was completed by June 2007. Minor laboratory testing to fill in data gaps may be required in the future. Current progress indicates that the Caltrans' designers will complete, as scheduled, the development of retrofit strategies for both bridges by early 2009.

### **Current Progress**

These bridges are currently being evaluated for seismic safety and post-earthquake performance.

Work is underway in three specific areas: seismology, geology and geotechnical engineering and bridge structural engineering.

Work in the area of seismology is defining the seismic ground motions used for design.
Recommended Safety Evaluation (SE) level motions have been developed for both bridges and are currently under review by and external and independent Seismic Safety Peer Review Panel (SSPRP). SE motions represent future large earthquakes. Work in this area to be completed in the near future includes finalizing the SE motions, developing lower level Functional Evaluation (FE) motions, and multiple earthquake time-histories that can be used in the checking phase of the projects.

Draft reports have been released. The SE motions have been reviewed by the Toll Bridge Seismic Safety Peer Review Panel on a few occasions.

Work in the area of geology and geotechnical engineering includes field drilling and studying of soil samples to identify soil types, locations and engineering properties. This work supports work in defining how the soil at the bridge sites move during earthquakes and how the rigidly the bridge's foundations are held in the soil. The drilling operations are complete at both bridge sites; information is being shared with the seismologic team and the bridge structure team. Draft reports have been released.

Work in the area of bridge structural engineering is continuing for both bridges. The structures team to date has been collecting and evaluating structural information on the bridges, reducing that information for use in computer models of the bridges, and initiating early computational runs of the models. Geological, geotechnical, and seismological information from the work areas mentioned previously is being incorporated into the bridge evaluations. The design team is currently analyzing the design of the existing structures. Caltrans is also working with the Peer Review Committee to obtain approval of the proposed design.

### **Summary of TBPOC Expenses**

Pursuant to Streets and Highways Code Section 30952.1 (d), expenses incurred by Caltrans, BATA, and the California Transportation Commission (CTC) for costs directly related to the duties associated with the TBPOC are to be reimbursed by toll revenues. *Table 11-Toll Bridge Program Oversight Committee Actual Expenses: July 1, 2005 through June 30, 2007* shows expenses through *June 30, 2007*, for TBPOC functioning, support, and monthly and quarterly reporting.

To be Updated

### **Table 11-Toll Bridge Program Oversight Committee**

Expenses: July 1, 2005 through June 30, 2007 (\$ Millions)

Agency/Program Activity	Expenses
ВАТА	0.2
Caltrans	0.5
стс	0.1
Reporting	1.4
Total Program	2.2

### **Appendices**

- A. TBSRP All Bridges AB 144/SB 66 Baseline Budget, Forecasts, and Expenditures through June 30, 2007 (A-1 and A-2).
- B. TBSRP East Span Only AB 144/SB 66 Baseline Budget, Forecasts, and Expenditures through June 30, 2007.
- C. CTC First Quarter Schedule.
- D. Project/Contract Photographs.

4,459.9

### Appendix A-1.

### To be updated

Toll Bridge Seismic Retrofit Program AB 144/SB 66 Baseline Budget, Forecasts, and Expenditures Through June 30, 2007						
AB 144/SB 66 Baselin	ne Budget, Fo	orecasts, and (\$ millions)	Expenditure	es Through Ju	ne 30, 2007	
Bridge	AB 144/SB 66 T Baseline		First Quarter 2007 Forecast	Second Quarter 2007 Forecast	Variance (2nd Q07-1st Q07)	Expenditures Through June 2007
Benicia-Martinez						
Capital Outlay Support	38.1	38.1	38.1	38.1	-	38.1
Capital Outlay Total	139.7 177.8	139.7 177.8	139.7 177.8	139.7 177.8	-	139.7 177.8
Carquinez						
Capital Outlay Support	28.7	28.7	28.7	28.7	_	28.8
Capital Outlay Total	85.5 114.2	85.5 114.2	85.5 114.2	85.5 114.2	-	85.4 114.2
San Mateo-Hayward						
Capital Outlay Support	28.1	28.1	28.1	28.1	_	28.1
Capital Outlay Total	135.4 163.5	135.4 163.5	135.4 163.5	135.4 163.5	- -	135.3 163.4
Vincent Thomas						
Capital Outlay Support	16.4	16.4	16.4	16.4	-	16.4
Capital Outlay Total	42.1 58.5	42.1 58.5	42.1 58.5	42.1 58.5	-	42.0 58.4
San Diego-Coronado						
Capital Outlay Support	33.5	33.5	33.5	33.5	-	33.2
Capital Outlay Total	70.0 103.5	70.0 103.5	70.0 103.5	70.0 103.5	-	69.4 102.6
Richmond-San Rafael						
Capital Outlay Support	134.0	127.0	127.0	127.0	-	126.4
Capital Outlay	780.0	698.0	698.0	698.0	-	666.2
Total	914.0	825.0	825.0	825.0	-	792.6
West Span Retrofit						
Capital Outlay Support	75.0	75.0	75.0	75.0	-	74.8
Capital Outlay	232.9	232.9	232.9	232.9	-	226.3
Total	307.9	307.9	307.9	307.9	-	301.1
West Approach						
Capital Outlay Support	120.0	120.0	120.0	120.0	-	94.8
Capital Outlay Total	309.0 429.0	309.0 429.0	309.0 429.0	309.0 429.0	-	246.5 341.3
SFOBB East Span						
Capital Outlay Support	959.4	959.4	977.1	977.1	-	511.1
Capital Outlay	4,492.1	4,674.6	4,686.6	4,689.9	3.3	1,872.1
Other Budgeted Capital	35.1	31.8	11.0	7.7	(3.3)	0.6
Total	5,486.6	5,665.8	5,674.7	5,674.7	-	2,383.8
Miscellaneous Program Costs	30.0	30.0	30.0	30.0	-	24.7
Subtotal Capital Outlay Support	1,463.2	1,456.2	1,473.9	1,473.9	-	976.4
Subtotal Capital Outlay	6,321.8	6,419.0	6,410.2	6,410.2	-	3,483.5
Subtotal Toll Seismic Retrofit	7,785.0	7,875.2	7,884.1	7,884.1	-	4,459.9
Program Contingency	900.0	809.8	800.9	800.9	-	-

Notes: \* Budget for Richmond-San Rafael Bridge include \$16.9 million of deck joint rehabilitation work that's considered to be eligible for seismic retrofit program funding. (Due to the rounding of numbers, the totals above are shown within \$0.1).

8,685.0

8,685.0

8,685.0

**Total Toll Seismic Retrofit Program** 

### **Appendix A-2.** (To be Updated)

### Toll Bridge Seismic Retrofit Program - SAS Alternative AB 144 Baseline Budget, Forecasts and Expenditures Through June 30, 2007 (\$ in millions) TBPOC Current AB 144 Baseline Expenditures to date and Estimated Costs not yet Bridge Total Forecast Budget Approved Budget Encumbrances Spent or Encumbered as of June 2007 as of June 2007 as of June 2007 See Note (1) (Columns C +D) Other Completed Projects 144.6 144 9 Capital Outlay Support 144 9 144 9 0.3 Capital Outlay 472.6 472.6 472.8 (0.1)472.7 Total 617.5 617.5 617.4 0.2 617.6 Richmond-San Rafael Capital Outlay Support 134.0 127.0 126.4 0.6 127.0 Capital Outlay 698.0 698.0 673.3 24.7 698.0 82.0 Project Reserves Total 914.0 825.0 799.7 25.3 825.0 West Span Retrofit Capital Outlay Support 75.0 75.0 74.8 0.2 75.0 Capital Outlay 232.9 232.9 232.8 0.1 232.9 Total 307.9 307.9 307.6 0.3 307.9 West Approach 95.5 120.0 Capital Outlay Support 120.0 120.0 24.5 Capital Outlay 309.0 309.0 299 9 9 1 309.0 Total 429.0 429.0 395.4 33.6 429.0 SFOBB East Span -Skyway Capital Outlay Support 197.0 197.0 167.0 30.0 197.0 Capital Outlay 1,293.0 1,293.0 1,238.1 54.9 1,293.0 1,490.0 1,490.0 1,490.0 1,405.1 84.9 SFOBB East Span -SAS- Superstructure 214.6 Capital Outlay Support 214.6 214.6 44.5 170.1 Capital Outlay 1.753.7 1.753.7 1,527.6 239.8 1.767.4 1,968.3 1,572.1 409.9 1,982.0 1,968.3 Total SFOBB East Span -SAS- Foundations 51.5 Capital Outlay Support 62.5 51.5 31.9 19.6 Capital Outlay 339.9 339.9 303.7 339.9 36.2 Total 402.4 391.4 335.6 55.8 391.4 Small YBI Projects Capital Outlay Support 10.6 10.6 10.2 0.4 10.6 Capital Outlay 15.6 15.6 16.2 (0.5)15.7 Total 26.2 26.2 26.4 (0.1)26.3 South/South Detour Capital Outlay Support 39.5 29.5 39.5 25.5 14.0 Capital Outlay 131.9 334.4 171.5 162.9 334.4 161.4 373.9 197.0 176.9 373.9 Total YBI - Transition Structures 78.7 Capital Outlay Support 78.7 78.7 14.7 64.0 Capital Outlay 299.4 276.1 0.1 276.0 276.1 340.0 Total 378.1 354.8 14.8 354.8 Oakland Touchdown 92.1 Capital Outlay Support 744 744 25.1 67.0 Capital Outlay 283.8 283.8 9.8 292.7 302.5 Total 358.2 358.2 34.9 359.7 394.6 East Span Other Small Project Capital Outlay Support 196.7 16.6 213.3 Capital Outlay 170.8 170.8 57.2 146.6 Total 383.1 384.1 286.1 73.8 359.9 Existing Bridge Demolition Capital Outlay Support 79.7 79.7 0.3 79.4 79.7 Capital Outlay 239.2 239.2 222.0 222.0 0.3 Total 318.9 318.9 301.4 301.7 Miscellaneous Program Costs 30.0 30.0 24 9 30.0 5.1 1,473.9 **Total Capital Outlay Support (2)** 1,463.2 1,456.2 982.1 491.8 **Total Capital Outlay** 6,321.8 6,419.0 5,035.2 1,375.0 6,410.2

7,785.0

**Program Total** 

7,875.2

1,866.8

7,884.1

<sup>(1).</sup> Funds allocated to project or contract for Capital Outlay and Support needs includes Capital Outlay Support total allocation for FY 06/07.

 $<sup>(2).\</sup> Total\ Capital\ Outlay\ Support\ includes\ program\ indirect\ costs.$ 

<sup>(</sup>Due to the rounding of numbers, the totals above are shown within \$0.1).

### **Appendix B.** (To be updated)

### Toll Bridge Seismic Retrofit Program - SFOBB East Span Only AB 144/SB 66 Baseline Budget, Forecasts, and Expenditures Through June 30, 2007

		(\$ milli	ions)			
	AB 144/SB 66	TBPOC Current	First Quarter 2007	Second Quarter 2007	Variance	Expenditures
East Span Contract	Baseline	Approved Budget See Note (1)	Forecast	Forecast	(2nd Q07 - 1st Q07)	Through June 2007
SFOBB East Span -Skyway						
Capital Outlay Support	197.0	197.0	197.0	197.0		165.8
Capital Outlay	1,293.0	1,293.0	1,293.0	1,293.0		1,164.6
Total	1,490.0	1,490.0	1,490.0	1,490.0	-	1,330.4
SFOBB East Span -SAS- E2/T1 Foundations						
Capital Outlay Support	52.5	41.5	41.5	41.5	-	22.6
Capital Outlay	313.5	313.5	313.5	313.5	-	230.1
Total	366.0	355.0	355.0	355.0	-	252.7
SFOBB East Span -SAS- Superstructure						
Capital Outlay Support	214.6	214.6	214.6	214.6	-	42.1
Capital Outlay	1,753.7	1,753.7	1,767.4	1,767.4	-	275.1
Total	1,968.3	1,968.3	1,982.0	1,982.0	-	317.2
SFOBB East Span -SAS- W2 Foundations						
Capital Outlay Support	10.0	10.0	10.0	10.0	-	9.2
Capital Outlay	26.4	26.4	26.4	26.4	-	25.8
Total	36.4	36.4	36.4	36.4	-	35.0
South/South Detour						
Capital Outlay Support	29.5	39.5	39.5	39.5	-	24.9
Capital Outlay	131.9	334.4	334.4	334.4	-	61.1
Total	161.4	373.9	373.9	373.9	-	86.0
YBI - Transition Structures						
Capital Outlay Support	78.7	78.7	78.7	78.7	-	14.5
Capital Outlay	299.3	276.1	276.1	276.1	-	-
Total	378.0	354.8	354.8	354.8	-	14.5
Oakland Touchdown (Total, including the following	ng split contracts and p	prior-to-split expenses)				
Capital Outlay Support	74.4	74.4	92.1	92.1	-	25.0
Capital Outlay	283.8	283.8	302.5	302.5	-	1.6
Total	358.2	358.2	394.6	394.6	-	26.6
Oakland Touchdown Contract - Submarine Cable	<u>,                                      </u>					
Capital Outlay Support	-	_	3.0	3.0	_	0.6
Capital Outlay	_	_	9.6	9.6	_	1.6
Total	-	-	12.6	12.6	-	2.2
Oakland Touchdown Contract No. 1 (Westbound	))					
Capital Outlay Support	-	-	49.9	49.9	-	4.2
Capital Outlay	_	-	226.5	226.5	_	_
Total	-	-	276.4	276.4	-	4.2
Oakland Touchdown Contract No. 2 (Eastbound) Capital Outlay Support			15.8	15.8		0.3
Capital Outlay Support	-	-	62.0	62.0	-	0.3
Total	-	-	77.8	77.8	-	0.3
Oakland Touchdown Contract - Electrical System	ns	<u> </u>	77.0	77.8	<u> </u>	0.3
Capital Outlay Support	_		1.4	1.4		0.1
Capital Outlay	_	_	4.4	4.4	_	0.1
Total	_	_	5.8	5.8	_	0.1
10111	-	-	5.6	5.6	-	0.1

### Appendix B. (Cont'd.)

### Toll Bridge Seismic Retrofit Program - SFOBB East Span Only AB 144/SB 66 Baseline Budget, Forecasts, and Expenditures Through June 30, 2007

(\$ millions) First Quarter 2007 Second Quarter 2007 Variance AB 144/SB 66 TBPOC Current Expenditures (2nd Q07 - 1st Q07) **East Span Contract** Baseline Approved Budget Forecast Forecast Through See Note (1) June 2007 YBI/SAS (Archeology) Capital Outlay Support 1.1 1.1 1.1 1.1 1.1 Capital Outlay 1.1 1.1 1.1 1.1 1.1 Total 2.2 2.2 2.2 2.2 2.2 YBI - USCG Rd Relocation Capital Outlay Support 3.0 3.0 3.0 3.0 2.7 Capital Outlay 3.0 3.0 3.0 3.0 2.8 Total 6.0 6.0 6.0 6.0 5.5 YBI - Substation and Viaduct Capital Outlay Support 6.5 6.5 6.5 6.5 6.4 Capital Outlay 11.6 11.6 11.6 11.6 11.3 Total 18.1 18.1 18.1 18.1 17.7 Oakland Geofill Capital Outlay Support 2.5 2.5 2.5 2.5 2.5 Capital Outlay 8.2 8.2 8.2 8.2 8.2 10.7 10.7 10.7 10.7 10.7 Total Pile Installation Demonstration Project Capital Outlay Support 1.8 1.8 1.8 1.8 1.8 Capital Outlay 9.2 9.2 9.2 9.2 9.3 11.0 11.0 11.0 11.0 11.1 Existing Bridge Demolition 79.7 797 0.3 Capital Outlay Support 797 797 Capital Outlay 239.2 239.2 222.0 222.0 Total 318.9 318.9 301.7 301.7 0.3 Stormwater Treatment Measures Capital Outlay Support 8.0 8.0 8.0 6.9 6.0 Capital Outlay 15.0 18.3 15.0 18.3 3.3 11.5 21.0 26.3 23.0 26.3 3.3 18.4 Right-of-way and Environmental Mitigation Capital Outlay Support Capital Outlay 72.4 72.4 72.4 72.4 38.8 Total 72.4 72.4 72.4 72.4 38.8 Sunk Cost - Existing East Span Retrofit Capital Outlay Support 39.5 39.5 39.5 39.5 39.5 Capital Outlay 30.8 30.8 30.8 30.8 30.8 70.3 70.3 70.3 70.3 70.3 Total Environmental Phase (Expended) Capital Outlay Support 97.7 97.7 97.7 97.7 97.7 Project Expenditures, Pre-splits 44.9 44.9 44.9 Capital Outlay Support 44.9 44.9 Non-project Specific Costs 19.0 19.0 3.2 Capital Outlay Support 20.0 19.0 959.4 977.1 977.1 Subtotal East Span Capital Outlay Support 959.4 511.1 Subtotal East Span Capital Outlay and Sunk Costs 4,492.1 4,674.6 4,686.6 4,689.9 3.3 1,872.1 Other Budgeted Capital (3.3)35.1 31.8 11.0 7.7 0.6

5,674.7

5,674.7

2,383.8

5,665.8

5,486.6

**Total SFOBB East Span** 

<sup>(1)</sup> Current contract allotment to install two submarine electrical cables is \$11.5 million. Additional non-program funding to support this allocation beyond the \$9.6 million of available programs funds has been made available by the Treasure Island Development Authority.

<sup>(</sup>Due to the rounding of numbers, the totals above are shown within \$0.1).

### **Appendix C.** (To be updated)

### CTC TBSRP Contributions Adopted December 2005

### Schedule of Contributions to the Toll Bridge Seismic Retrofit Program (\$ million)

Source	Description	2005-06 (Actual)	2006-07 (Actual)	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	Total
	SHA	290									290
	PTA	80	40								120
AB 1171	Highway Bridge Replacement and Rehabilitation (HBRR)	100	100	100	42						342
	Contingency				1	99	100	100	148		448
	SHA*	2	8				53	50	17		130
AB 144	Motor Vehicle Account (MVA)	75									75
AD 144	Spillover		125								125
	SHA**									300	300
	Total	547	273	100	43	99	153	150	165	300	1830

<sup>\*</sup> Caltrans Efficiency Savings

<sup>\*\*</sup> SFOBB East Span Demolition Cost

### Appendix D.

# Project/Contract Photographs SFOBB East Span Replacement Project

### **Skyway Contract**



Skyway - Barge used for the Box Girder Soffit Repairs



Skyway- Looking West



Skyway - Overlay Operation



Skyway – Painting Bike Path

### Skyway Contract (Cont'd.)



Skyway - Overlay Operation



Skyway Bridge Looking from Yerba Buena Island

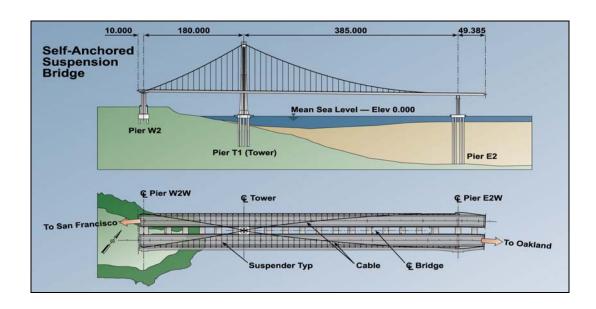


Skyway - Stairs Leading to the Substation

### **SAS Superstructure Contract**



SAS Superstructure Artist Rendition



### **SAS Superstructure Contract (Cont'd.)**

### To be Updated

# SAS Superstructure Construction Progress Pier W2 Pier T1 Pier E2 Field work to be completed Field work in progress Completed field work

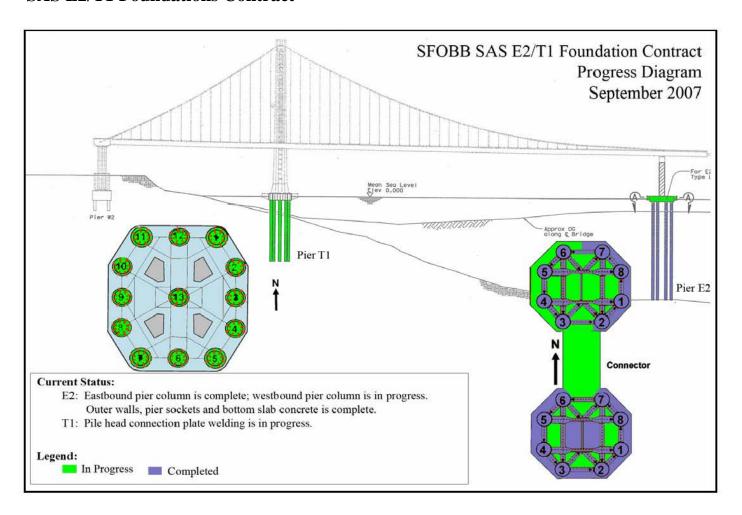




W2 & W3 Bents for the Transition Structure

W2 Bent for the Transition Structure

### **SAS E2/T1 Foundations Contract**









E2-T1 - Westbound Column at E2

### **SAS E2/T1 Foundations Contract (Cont'd.)**



T1 = Foundation for the 530-foot steel tower E2 = Eastern Support of the suspension roadway W2 = Western Support of the suspension roadway







E2&T1 Foundation, with Skyway at the Background

### **YBID** and Stormwater Contracts



YBID - Advanced Work and Viaduct Columns



YBID - Viaduct First Steel Shipment



YBID - Viaduct First Steel Shipment



YBID - Viaduct First Steel Shipment

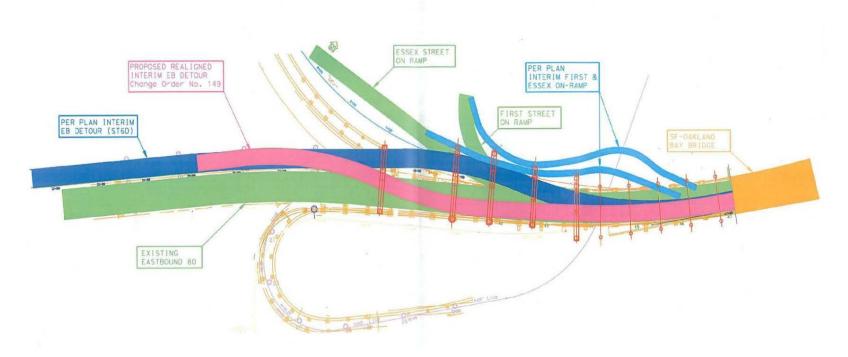




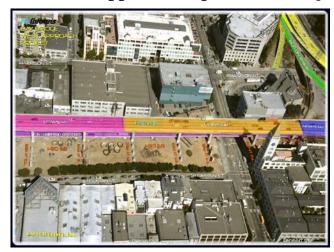
**SFOBB West Approach Replacement Project** 

### WEST APPROACH (EA 04-0435V4)

REALIGNMENT OF STOD STAGE 5 DETOUR



### SFOBB West Approach Replacement Project (Cont'd.)



West Approach - Overhead of 2nd St.



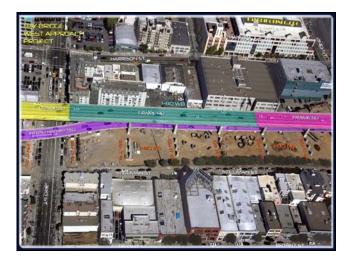
West Approach - Overhead of the 5th St. Off Ramp



West Approach -Overhead of the 5th St. Off Ramp

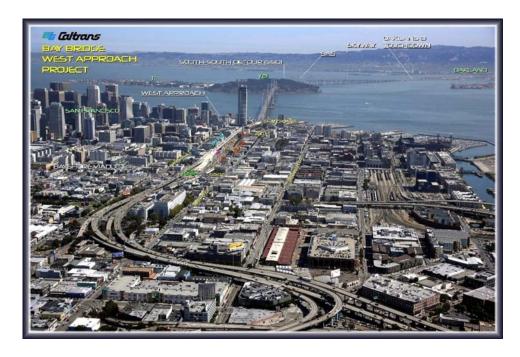


West Approach -Harrison St. Off Ramp



West Approach – Overhead Between 2nd Street and 3rd Street

### SFOBB West Approach Replacement Project (Cont'd.)



West Approach Overhead View Looking East at Yerba Island



West Approach Overhead View Looking North

# **ITEM 4: PROGRAM ISSUES**

### **ITEM 4: PROGRAM ISSUES**

a. TBSRP Capital Outlay Support (COS) Update



### Memorandum

TO: Toll Bridge Program Oversight Committee (TBPOC) DATE: October 23, 2007

FR: Peter Lee, Senior Transportation Engineer, BATA

Ali Banani, Manager of Toll Bridge Project Control, Caltrans

RE: Agenda No. 4a

Program Issues

Item- TBSRP Capital Outlay Support (COS) Update

### **RECOMMENDATION:**

For Information Only

### COST:

The 3<sup>rd</sup> Quarter 2007 risk management assessment of capital outlay support shows potential cost risks of \$152 M for the entire program.

### **SCHEDULE:**

N/A

### **DISCUSSION:**

### **Current Status**

TBSRP Capital O	
AB 144 Budget:	\$1,463 M
Current Budget:	\$1,456 M
Expenditures:	\$1,004 M
Remaining Budget:	\$452 M

<u>Distribution of Remaining COS Budget</u> <u>As Of June 30, 2007:</u>					
SAS	\$164 M	36%			
Skyway/E2 T1*	\$44 M	10%			
YBITS/Detour*	\$73 M	16%			
OTD*	\$65 M	15%			
Demo	\$79 M	17%			
West Approach*	\$22 M	5%			
Other	\$5 M	1%			
Total	\$4 <del>52 M</del>	$10\overline{0\%}$			

### Memorandum



As of September 30, 2007, the Department has expended \$1,004 M or 69% of the \$1,456 M current TBSRP COS budget. Most of the remaining COS budget to be expended is for the SAS, YBITS, OTD, and Demo contracts. The attached presentation shows a more detailed breakdown of COS expenditures by project and contract.

### **COS Budget Development Process**

For FY 2007-08, the Department has now received the final allocation of COS resources. BATA has already budgeted and allocated COS funds for FY 2007-08 based on projections of need made earlier this year as a part of the COS budgeting and allocation process. A detailed breakdown of the COS work plan development process and timeline is attached along with a specific COS breakdown example for FY 2007-08.

### Risk Management

The 3<sup>rd</sup> Quarter 2007 risk assessment of capital outlay support shows a potential cost risk of \$152 M for the entire program. The Department has organized COS risks into four major categories – 1) Schedule, 2) State Personnel Rates, 3) Resource Usage, and 4) Project Specific. The attached presentation shows a more detailed breakdown of COS risks by contract.

It should be noted that this risk assessment does not yet take into account the comprehensive review of project and program schedule risk currently being performed for the Risk Management assessment. The initial review of schedule risks has identified a potential extension to the East Span project schedule. This could potentially result in additional COS costs due to longer personnel assignments and added escalation.

Schedule \$84 M

- The majority of the COS cost risk is due to potential delays in completing the SAS contract work and the 12-month extension to the baseline SAS schedule authorized by addenda 5 and 6 to secure multiple bidders. The schedule extensions result in longer personnel assignments on the SAS contract, and additional projected escalation on the later follow-on YBITS, OTD, and Demolition contracts.
- Longer personnel assignments are also needed on the YBI Detour project due to pacing of the work with the SAS schedule.

### State Personnel Rates \$67 1

• The AB144 COS budget, when forecast in August 2004, assumed cost escalation of between 3% and 5% for salaries and overhead.



• State Collective Bargaining Agreements have provided for salary and benefit increases higher than anticipated for a range of staff. Additional increases in excess of planned are included in the risk assessment.

FY 06-07 7~12%FY 07-08 9~14%

➤ FY 08-09 and beyond Additional increases expected

 Overhead Rates (excluding Administrative Overhead, which is not assessed for the TBSRP) have fluctuated significantly from year to year. Additional fluctuations are expected.

FY 05-06	37.54%
FY 06-07	48.79%
FY 07-08	44.54%

### Resource Usage -\$48 M

• The assessment of resource usage evaluates how actual/projected COS resources are being used as compared to the planned/current budget. The risk assessment evaluates the accuracy of the AB 144/Current COS budget based on COS trends and new project information. The majority of the savings in this category are from of the Skyway, E2/T1, and Demolition contracts that are projected to finish with COS expenditures lower than budget.

### **Project Specific Risks**

\$49 M

Project specific risks are additional COS resources needed to address issues
identified in the CO risk registers. These risks include costs for additional overseas
inspections, the transfer of YBI Detour design work (WTI and ETI) from the
contractor to the Department, and additional design and construction
administration efforts resulting from the splitting of the OTD and YBITS projects
into multiple contracts.

### **Risk Mitigation Strategies**

The Department has evaluated a number of mitigation strategies to address COS risks. Schedule has been determined to be the most cost sensitive risk that can be significantly influenced at a project/program level. Completing the East Span project on the opportunity schedule would result in a savings of approximately \$25 to \$30 million through reduced resource usage and escalation. Other mitigation strategies could include utilization of less expensive State staff in lieu of A/E staff and/or a reduction in overall staffing. However, the impact of these savings is not likely to be as significant as meeting the opportunity schedule.



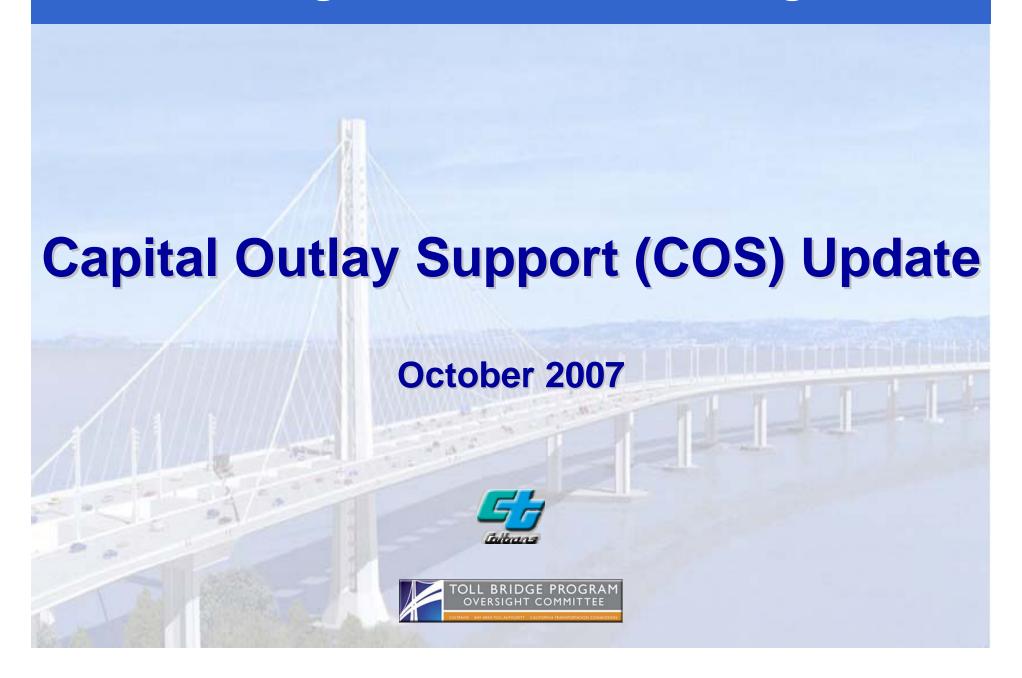
Table 1 - Risk Mitigation Strategies

Risks	Ability to Influence	Mitigation Strategies	Pro's	Con's
Schedule	Moderate	Opportunity Schedule to accelerate work and minimize resource usage	• Approximate savings of \$25 to \$30 million from reduced resource usage and escalation	<ul> <li>Cost of construction acceleration is likely significantly high.</li> </ul>
State Personnel Rates	None	None at project level		
Resource Usage	High	<ul> <li>Utilize additional state staff in lieu of A/E staff</li> <li>Reduce overall staffing</li> <li>Maximize staffing efficiency</li> </ul>	<ul> <li>Savings of \$175k/yr per</li> <li>PY and \$230k/yr per</li> <li>PYE</li> <li>Savings of \$55k/yr using</li> <li>State staff in lieu of A/E personnel</li> </ul>	<ul> <li>Potential for QC and construction inspection issues.</li> <li>Potential for more OT and lack of qualified staff.</li> </ul>
Project Specific Risks	Low	<ul><li>Reduce overall staffing</li><li>Maximize staffing efficiency</li></ul>	• Same as above	• Same as above

### Attachment(s):

1) Copy of Capital Outlay Support Update Presentation

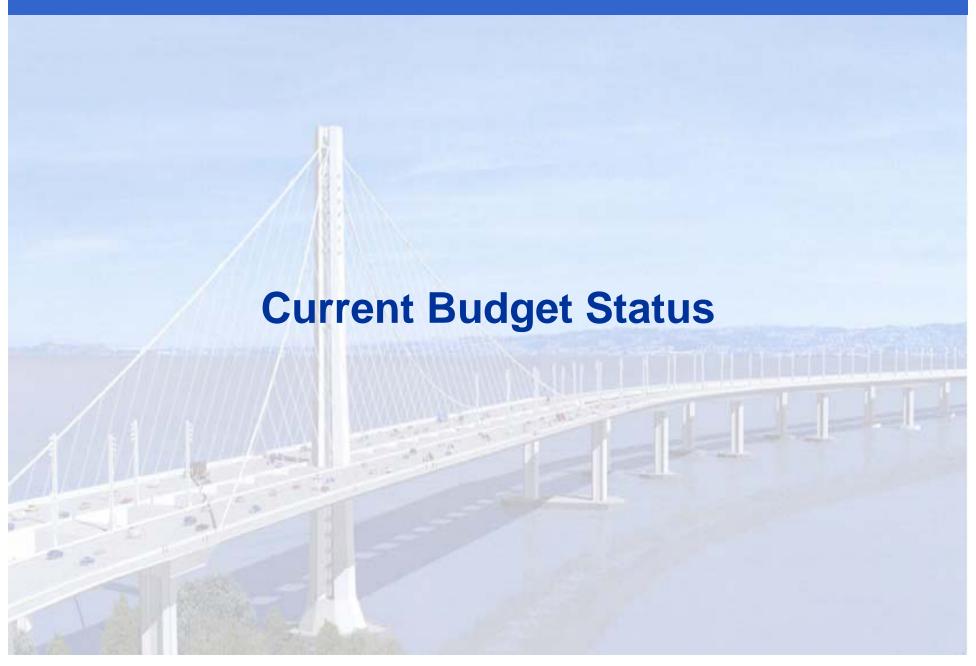
## **Toll Bridge Seismic Retrofit Program**



# **Capital Outlay Support Update**



# **Capital Outlay Support**



## **COS Budget Status**

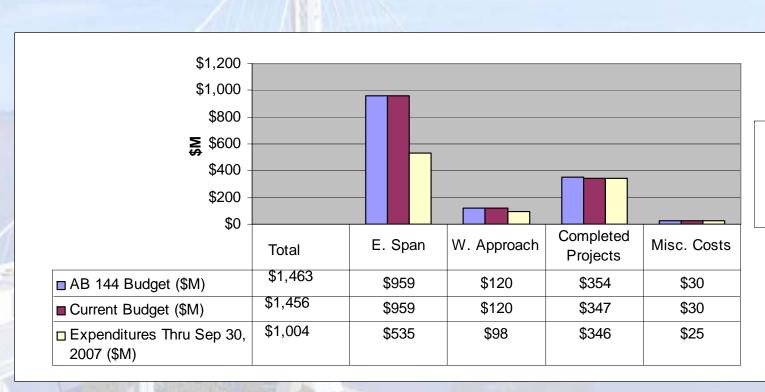
As Of September 30, 2007

AB 144 Budget: \$1,463 M

Current Budget: \$1,456 M

Expenditures: \$1,004 M

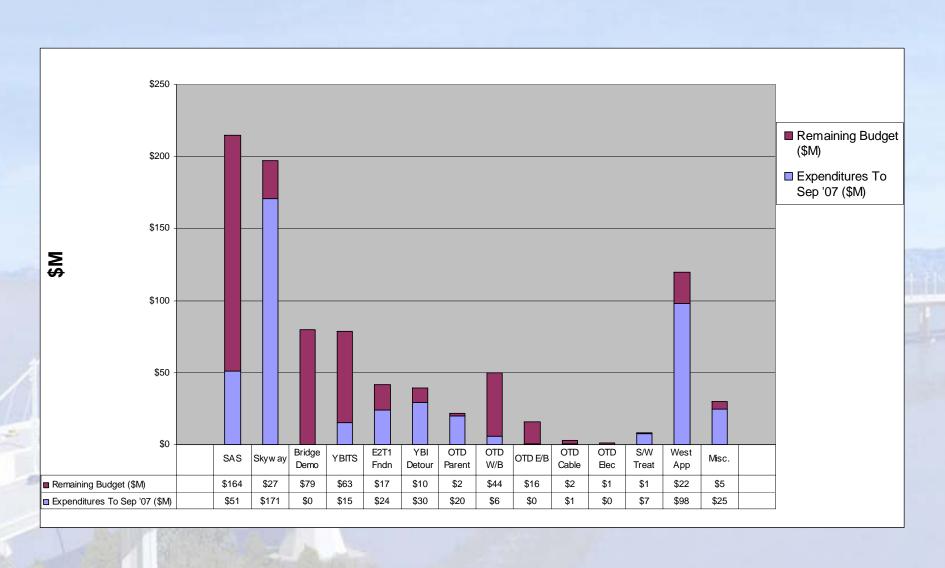
Remaining Budget: \$ 452 M



- AB 144 Budget (\$M)
- Current Budget (\$M)
- □ Expenditures Thru Sep 30, 2007 (\$M)

## **COS Budget Status- Ongoing Projects**

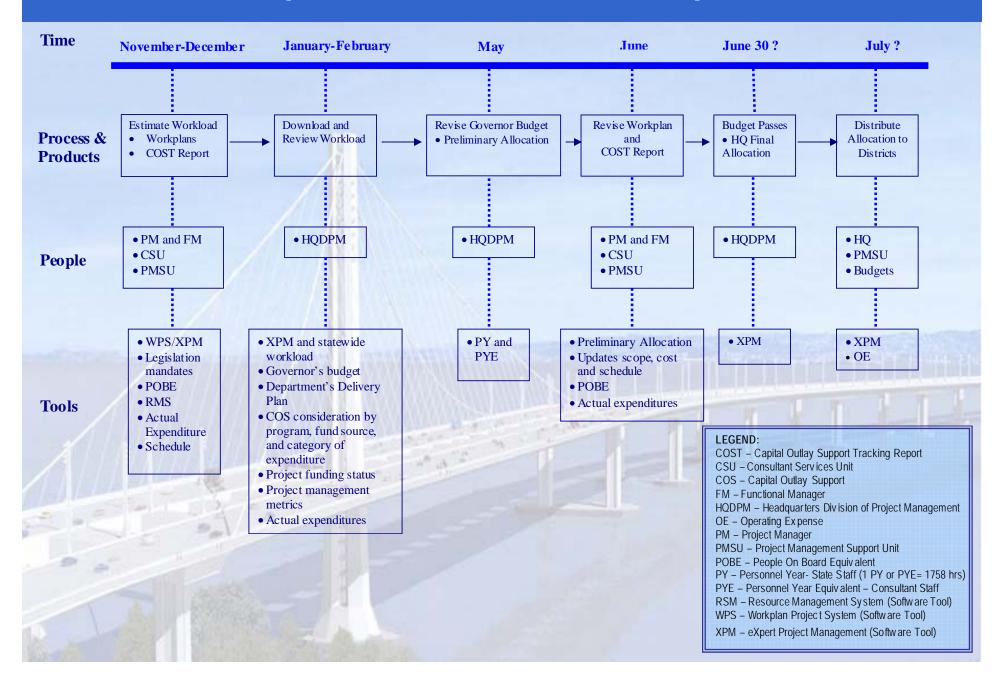
As of September 30, 2007



# **Capital Outlay Support**



## FY COS Workplan and Allocation Development Timeline



# **Example: SAS FY 07/08 Workplan**

	FY 07/08 WORKPLAN				FY			pend arter	liture
					1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>	4 <sup>th</sup>	Total
CONSTRUCTION				PY	4.0	6.8	7.6	8.5	26.9
	Inspection Administration Claims Schedule Document Control Management Office Engineer	PY = 57.0	PYE = 24.8	PYE	1.5	2.2	1.8	3.2	8.7
METS	The state of the s	PY = 6.0	<b>PYE = 40.0</b>	PY	0.2	0.1	0.2	0.6	1.0
	Materials Engineering Testing Serv	vices		PYE	0.5	1.1	3.6	3.8	8.9
DESIGN	Ass. 244	PY = 8.5	PYE = 35.0	PY	1.0	1.0	1.0	0.9	3.8
	Structure Design Roadway Design			PYE	3.2	5.5	8.1	14.4	31.2
MANAGEMENT	AVANON A LANGUAGO	PY = 11.2	PYE = 3.1	PY	0.9	1.2	1.7	1.6	5.4
	Program/Project Management Program/Project Monitoring & Con Schedule and Resource Planning Capital Management Risk Management	trol		PYE	1.6	0.7	1.4	1.0	4.7
OTHERS		PY = 3.6	PYE = 0.6	PY	0.2	0.3	0.7	1.1	2.3
	Right of Way Environmental Geotechnical Services			PYE				0.1	0.1
TOTAL		PY = 86	PYE = 104	PY	6.2	9.3	11.2	12.7	39.5
				PYE	6.8	9.4	14.9	22.5	53.6

# **Capital Outlay Support**



## **Risk Categories**

Risks to complete within remaining budget

- Schedule
- State Personnel Rates
- Resource Use
- Project Specific

## Risk Category - Schedule

## Schedule

### 12 Month extension of SAS schedule from AB 144 baseline:

- Extends personnel assignments on SAS
- Shifts completion of East Bound YBITS, OTD & Demolition projects resulting in added labor cost escalation
- Pacing of YBI Detour, and advancing of YBITS scope to YBI Detour project extends contract duration and staff assignments

### Delays resulting from schedule impacts identified in CO risk registers:

- Extends personnel assignments on projects

## Risk Category – Personnel Rates

State Personnel Rates

### **Wage Rates**

- Collective Bargaining Agreement provides for salary increases higher than anticipated in August 2004 when AB 144 developed

FY 06 – 07 increases 7-12% FY 07 - 08 increases 9-14%

Additional increase expected in FY 08-09

### **Overhead Rates**

- Rate varies year to year

FY 05 - 06 rate (AB 144) 37.54% FY 06 - 07 rate 48.79% FY 07 - 08 rate 44.54%

## Risk Category – Resource Use

### Resource Use

Differences in actual/estimated use vs. planned resource needs

Applies primarily to projects well into construction where trends adequately defined

Also assesses accuracy of AB 144/current budget

 Resources needed to address unforeseen issues identified in CO risk registers

## Risk Category - Project Specific

Project Specific Risks

## **Examples**

- Overseas Inspections
   Expenses incurred by State & A/E personnel to coordinate & inspect steel fabrication
- Transfer of work from Contractor to State
   Assumption of tie in design from YBI Detour contractor
- Project Splits

Additional design and construction administration efforts resulting from splitting OTD & YBITS into multiple projects

# **Capital Outlay Support**



## **Risk Assessment**

## **COS Cost Differential From Current Approved Budget**

Project	Schedule	Rates	Resources	Project Specific	Total
SAS	\$ 66M	\$ 19M	\$ 8M	\$ 18M	\$111M
Skyway	3///	\$ 5M	(\$ 17M)		(\$12M)
E2T1Foundations	1: \\\\\\	\$ 2M	(\$ 9M)		(\$7M)
YBI Detour	\$ 9M	\$ 2M	\$ 1M	\$ 15M	\$27M
YBITS	\$ 4M	\$ 10M	\$ 1M	\$ 8M	\$23M
OTD Contracts	\$ 3M	\$ 11M	(\$ 1M)	\$ 8M	\$21M
S/Water			\$1 M		\$1M
Demolition	\$ 2M	\$ 13M	(\$ 33M)	FL T	(\$18M)
W. Approach	W	\$ 5M	\$ 1M		\$6M
	1k			99. 1	
TOTAL	\$ 84M	\$67M	\$ ( 48M)	\$ 49M	\$152M

# **Capital Outlay Support**



# **Risk Reduction Options**

## **Schedule**

Strategy	COS Impact	Offsetting Impacts
Accelerate SAS schedule (Opportunity schedule)	Estimated savings \$21M - \$24M (\$3.5M - \$4M/Mo)	Cost of incentives
Complete OTD, YBITS & Demolition projects earlier with accelerated SAS Schedule (Opportunity schedule)	Average estimated savings \$6M - \$7M	None
Compress Contract Time on larger projects yet to be bid (YBITS #1 & 2, OTD# 2)	YBITS: \$1.5 - 2M/Mo OTD#2: \$0.4 - \$0.5M/Mo	Potential for higher bid prices to compensate for accelerated construction

# **Risk Reduction Options**

## Resources

Strategy	COS Impact	Offsetting Impacts
Reduce State & A/E Staff	Average \$175 k/PY Average \$230 k/PYE	Potential QC issues More claims Potential schedule impacts
Share staff & functions across projects	Same as above - Being Implemented	Potential OT compensation
Monitor actual vs. Estimated Staff Use	Same as above - Being Implemented	N/A
Reduce A/E staff & perform the scope with State Staff	Approx. \$55K/PYE	Staff availability & capability

# **Risk Reduction Options**

## **Project Specific**

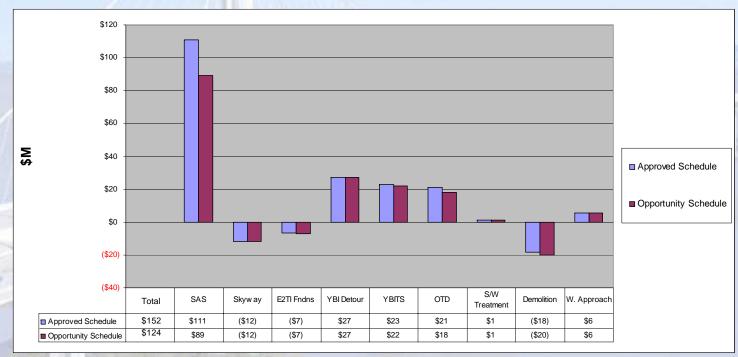
S	Strategy	COS Impact	Offsetting Impacts
S	Reconsider number of State & METS ersonnel overseas	Reduced resource use and overseas expenses	Potential QC issues Disputes & miscommunication Potential schedule delays
1			More Claims

## **Conclusions**

### **Summary of the COS Cost Differential From Current Approved Budget**

Risk	Estimated Amount	Pct	Ability To Control
Schedule	\$84M	55%	Moderate
Rates	\$67M	44%	None
Resources	(\$48M)	(31%)	High
Project Specific	\$49M	32%	Low

### Risk Comparison - Approved vs. Opportunity Schedule



## **ITEM 4: PROGRAM ISSUES**

b. Coordination of Permit Requirements with Related External Planning



TO: Toll Bridge Program Oversight Committee DATE: October 23, 2007

(TBPOC)

FR: Tony Anziano, Toll Bridge Program Manager, Caltrans

RE: Agenda No. - 4b

**Program Issues** 

Item- San Francisco-Oakland Bay Bridge Coordination of Permit Requirements

with Related External Planning

#### **Recommendation:**

For Information Only

**Cost:** 

N/A

### **Schedule Impacts:**

N/A

#### **Discussion:**

A number of different planning efforts are either underway or upcoming regarding development of the Oakland Spit, the peninsula that currently houses the toll plaza and eastern end of the San Francisco-Oakland Bay Bridge. Several of these efforts involve the Department of Transportation (Department), and they include:

City of Oakland - redevelopment of former Oakland Army Base property (Pier 7, Burma Road, etc);

Port of Oakland - port expansion;

East Bay Regional Park District (EBRPD) - development of the new Gateway park at the end of the spit;

East Bay Municipal Utility District - facility expansion;

Department - new maintenance village;

Department - public access permit requirements from the Cypress project (bike paths);

Department - public access requirements from the East Span project (bike paths, landscaping/additional area for joint use by the Department and EBRPD); and

Department - historic preservation requirements from the National Historic Preservation Act section 106 Memorandum of Agreement.



The specific East Span efforts are based on permit and agreement requirements. These requirements are:

- 1 San Francisco Bay Conservation and Development Commission (BCDC) Permit 8-01 requires the Department to provide a public access area at the Oakland Touchdown to be comprised of:
- an approximately 0.37-acre area to be used as an interim parking lot and crosswalk that would eventually become part of the proposed Gateway Park;
- An approximately 0.25-acre public access pathway connecting the parking lot to the bicycle/pedestrian pathway on the replacement bridge;
- A 4.2-acre parcel within the existing bridge approach, to improve public access and treat stormwater runoff as part of the proposed Gateway Park, with the public access area being incorporated into the EBRPD Gateway Park to the extent that the Department is legally able to do so and subject to the Department's existing and future operational and maintenance needs; and
- All necessary connectivity to the public access developed under permit 11-93 for the Cypress project.
  - 2 Memorandum of Agreement (MOA) under Section 106 of the National Historic Preservation Act (NHPA), approved by the State Historic Preservation Officer (SHPO) and Advisory Council on Historic Preservation. The MOA requires the Department to develop an engineering record of the existing East Span, including preservation of selected bridge elements, and to contribute \$1.5 million towards a museum exhibit focused on Bay Area bridges generally as well as the East Span specifically.

In an attempt to coordinate the requirements of permit 8-01 and the MOA the Department initiated a research and coordination effort involving all interested parties. To continue and expand on the initial planning and research efforts, the TBPOC may want to consider hosting a meeting, preferably on site, with key stakeholders in early 2008. The purpose of this conference is to jumpstart a cohesive and coordinated process that delves into such issues as the new bridge and permit requirements, connectivity of the bike paths, museum, location and design of the maintenance village, land ownership and redevelopment plans.

The goal is to have a small, focused group of representatives from stakeholder agencies to brainstorm ideas and participate in an open dialogue about the future of the Gateway Park site. A preliminary list of potential invitees is presented on the next page. There are many competing interests and uniform agreement may not be achievable, but this will provide the best opportunity to comply with permit/MOA obligations in a way that conforms to the various planning efforts to the greatest extent possible.



### **List of Potential Invited Participants**

Caltrans	Will Kempton	Director, TBPOC Chair
	Randy Iwasaki	Chief Deputy Director
	Tony Anziano	Toll Bridge Program Manager
	Ken Terpstra	Toll Bridge Project Manager
	Bijan Sartipi	District Director
	Nidal Tuqan	Regional Project Manager
	Clive Endress	Senior Landscape Architect
	Mark Shindler	right of way
	Jim Richards	environmental
	Meg Scantlebury/Beth Krase	cultural resources
BATA	Steve Heminger	Executive Director, TBPOC Member
	Andy Fremier	Deputy Executive Director, BATA
	Rod McMillan	Director, Bridge Oversight & Operations
	Peter Lee	Senior Transportation Engineer
CTC	John Barna	Executive Director, TBPOC Member
	Stephen Maller	Deputy Director
	Dina Noel	Associate Deputy Director – Toll Program
BCDC	Will Travis	Executive Director
	Steve McAdam	Deputy Director
	Brad McCrea	Bay Development Design Analyst
EBRPD	Pat O'Brien	General Manager
	Bob Doyle	
	Brian Weise	
City of Oakland	Mayor Ron Dellums	Mayor
	Bob Brauer	
	Alex Greenwood	Redevelopment
	Claudia Cappio	Development Director
Port of Oakland	Omar Benjamin	Executive Director
ABAG	Henry Gardner	Executive Director
EBMUD	tbd	
ACCMA	tbd	
SHPO	tbd	

### **Attachments:**

N/A

# ITEM 5: SAN FRANCISCO-OAKLAND BAY BRIDGE UPDATES



TO: Toll Bridge Program Oversight Committee DATE: October 23, 2007

(TBPOC)

FR: Tony Anziano, Toll Bridge Program Manager, Caltrans

**RE:** Agenda No. - 5a, 1)

San Francisco-Oakland Bay Bridge Updates

Item- Yerba Buena Island

Update: Labor Day Weekend Closure for Detour West Tie In

Work/YBI Viaduct Replacement

### **RECOMMENDATION:**

For Information Only

### **DISCUSSION:**

A debrief on successes and lessons learned will be provided on activities over the Labor Day weekend bridge closure.

#### Attachment(s):

N/A

# ITEM 5: SAN FRANCISCO-OAKLAND BAY BRIDGE UPDATES

- a. Yerba Buena Island
- 2) Contract Change Orders
  - a) CCO No. 91 S1



TO: Toll Bridge Program Oversight Committee DATE: October 23, 2007

(TBPOC)

FR: Tony Anziano, Toll Bridge Program Manager, Caltrans

**RE:** Agenda No. - 5a(2),(3)

San Francisco-Oakland Bay Bridge

Item- YBI Contract Change Orders, Budget Balance Beam

#### **RECOMMENDATION:**

CONFIRM approval of final Contract Change Orders (CCOs) 73 and 91, Supplement 1 for the Yerba Buena Island Detour contract.

#### COST:

\$71.4 million, within current budget.

#### **SCHEDULE:**

N/A

#### **DISCUSSION:**

On June 27, 2007 the TBPOC approved an overall Implementation Memo for all currently known CCOs needed for the various elements of work on Yerba Buena Island (YBI) involved in the detour and the Transition Structure advance work. The Implementation Memo provides an estimate for these CCOs of \$334 million, and a budget revision was subsequently approved by the TBPOC based on this estimate. The current estimate, including the two CCOs being presented for approval, remains within the \$334 million budget recently established by the TBPOC. However, as discussed below, there is still upward pressure on this budget based on identified risk.

CCOs 73 and 91 were included in the approved Implementation Memo. CCO 73, totaling \$70 million, is for the balance of the remaining advance foundation work for the Yerba Buena Island Transition Structure. CCO 91, Supplement 1 is for additional time related overhead (TRO) associated with the significant extension of the duration of this contract. The TRO is based on TRO established with the original scope of work. An audit is underway to establish a new TRO rate based on the increased scope of work.

# TOLL BRIDGE PROGRAM OVERSIGHT COMMITTEE CAUTEAUS BAY AREA TOLL AUTHORITY CAUTIONIA TEARS STOTATION COMMISSION

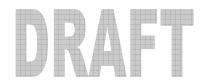
### Memorandum

Completion of the audit is expected to take several months. However, to insure appropriate cash flow to the contractor, approval of a CCO based on the current rate is being requested. The TBPOC previously approved a limited CCO (the initial CCO 91) for a short duration as the TBPOC requested an updated budget balance beam prior to approval of any long term CCO for TRO.

An updated budget balance beam (BBB) has been developed and is attached to this memorandum. The BBB is based on a new risk management analysis that was performed in a manner consistent with the breakdown of the categories of work defined in the Implementation Memo. The new BBB indicates a risk management cost of \$400 million. Certain defined risks appear likely to occur and an forecast revision in the 4<sup>th</sup> Quarter is likely.

#### Attachment(s):

- 1) CCO Implementation Plan
- 2) Draft CCO 73 and CCO Memorandum
- 3) Draft CCO 91, Supplement 1 and CCO memorandum
- 4) Budget Balance Beam



South-South Detour (Contract 04-0120R4)					
Contract Award: March 10th, 2004 Suspension Days (as of 04/13/07): 572 Working Days					
Original Working Days:	475 Working Days	Contract Extentions (as of 04/13/07):	381 Working Days		
Original Contract Completion:	July 27th, 2005	Projected Contract Completion:	December 31, 2009		
Orignal Contract Amount:	\$71,159,650	Projected Contract Cost:	\$334,400,000		

#### Introduction

Two memos were developed to outline a strategy for a revised SSD project that enhanced SSD viaduct design, developed tie-in design (east and west) in-house, improved the retrofit of the YBI viaduct (replacing the top deck of the viaduct rather than retrofitting in place) and advanced and incorporated select YBITS foundation work. The two memos are "San Francisco-Oakland Bay Bridge Corridor Schedule Mitigation – Strategy for South-South Detour Contract Completion" issued December 14, 2006, and "Recommendation to Construct Select Yerba Buena Island Transition Structure Foundations by Contract Change Order" issued on December 25, 2006. This strategy will result in substantial increases in the cost of the SSD project. The SSD forecast and budget were recently revised and the current forecast and budget have been set at \$ 334 million. This figure was based on estimates developed and presented in the two strategy memos as well as the original contract amount, pre-existing contract change orders (CCO) and a contingency/risk management adjustment.

The purpose of this document is to provide a status of the construction budget, and serves as a check between CCO expenditures, estimates developed in the strategy memos and the approved funding for the project.

### **Baseline Contract Change Orders for South-South Detour Contract**

CCO#	Description	Executed Date	Cost
1	Flagging and Traffic Control	5/13/2004	\$100,000.00
1S1	Additional Funds for Flagging and Traffic Control	2/9/2007	\$200,000.00
2	Bidder Compensation	5/8/2004	\$1,575,000.00
3	Partnering	9/7/2004	\$25,000.00
4	DRB	9/7/2004	\$100,000.00
5	Federal Trainee Program	11/12/2004	\$20,000.00
5S1	Non-Journey Person Training	3/10/2005	\$50,000.00
6	Removal of DBE/SBE Monitoring	2/10/2005	\$0.00
7	Sampling and Analysis Work	8/30/2004	\$30,000.00
8	SWPPP Maintenance Sharing	8/30/2004	\$75,000.00
9	Additional Photo Survey/Public Relations	9/14/2004	\$50,000.00
10	Temporary Shuttle Van Service	7/16/2004	\$650,000.00
10S1	Additional Funds for Temporary Shuttle Van Service	6/23/2005	\$100,000.00
10S2	Additional Funds for Temporary Shuttle Van Service	1/12/2007	\$500,000.00
11	Utility Potholing	9/14/2004	\$100,000.00
12	Just-In-Time Training (RSC Pavement)	2/10/2005	\$5,000.00
13	PMIV Document Management System	11/3/2004	\$486,743.50
14	Temporary Suspension	5/19/2004	\$0.00
15	Archaeology Investigation	7/19/2004	\$30,000.00
15S1	Additional Funds for Archaeology Investigation	4/22/2005	\$15,000.00
16	Roadway Profile at WTI	Voided	N/A
17	Modify Drainage at G4 Entry Vault	10/24/2006	\$108,217.45
18	Access Control Measures	9/8/2004	\$50,000.00
19	EDR1 Alignment Modification	5/12/2005	\$0.00
20	A490 Bolts	10/23/2006	\$0.00
21	Removal /Disposal of Stairway	4/13/2005	\$14,060.00
22	Clean Stairs and Walkways	5/24/2005	\$35,000.00
23	Shared Field Data System (ShareArchive)	Voided	N/A
24	East and West Tie-In Temporary Suspension	2/1/2005	\$2,181,467.40
24S1	Read Inclinometer/Adjust Equipment Costs	10/18/2005	\$29,782.99

CCO#	Description	Executed Date	Cost
24S2	Temporary Suspension Partially Extended	5/2/2006	\$4,812,631.58
24S3	Contract Days Extention/TRO Compensation	Voided	N/A
25	Bent 48, 49R, 52R Outside Boundry	3/24/2005	(\$19,000.00)
26	Bent 48 Articulation	4/22/2005	\$0.00
27	Bent 52L Footing Conflict	1/19/2006	\$94,386.51
28	Hydroseed Around W2 Columns	3/24/2005	\$20,000.00
29	Replacement of Surveillance Camera	3/24/2005	\$3,542.00
30	Additional Elastic Response Analysis	5/31/2005	\$10,700.00
31	Soil Analysis Outside Plan Limits	6/27/2005	\$20,000.00
32	SFPUC Permit Specification Change	5/17/2005	\$0.00
33	Design Enhancements	Voided	N/A
34	Pole Structure Welding Specification Revision	9/30/2005	\$0.00
35	Revision of East Tie-In Design Criteria	Voided	N/A
36	Extend Limits of Viaduct Demolition	10/5/2005	\$16,734.80
37	4 Hr Emergency Travel Way	Voided	N/A
37S1	Emergency Travel Way Falsework	Voided	N/A
38	Revision of West Tie-In Design Criteria	8/4/2005	\$0.00
39	Provide Shuttle Service to USCG	6/27/2005	\$10,000.00
40	Sewer Pipe Material Change	9/26/2005	\$1,561.95
41	Bent 49L Utility Relocation	Voided	N/A
42	Bent 48R Pile Load Test	9/12/2005	\$20,000.00
42S1	Bent 52R Pile Load Test	12/15/2005	\$5,000.00
43	Material On Hand Specification Change	9/16/2005	\$75,953.88
43S1	Addition of YBITS Advance to Material On Hand	Voided	N/A
44	Electrical Call Box Relocation	Pending	TBD
45	Additional SWPPP	2/21/2006	\$250,000.00
46	Southgate Road Reopening	3/8/2006	\$100,000.00
47	Hazardous/Non-Hazardous Soil Removal	12/15/2005	\$100,000.00
48	Buried Man-Made Objects	12/15/2005	\$50,000.00

**Total for Basline Contract Change Orders** 

\$12,101,782.06

### Scope of Work for SSD

The revisions to the original scope of work currently associated with the South-South Detour Project have been broken down into the following categories:

- (1) SSD New Viaduct Enhancements
- (2a) West Tie-In Existing Viaduct Phase 1
- (2b) West Tie-In Phase 2
- (3) East Tie-In
- (4) YBI Transition Structure Advance Foundations
- (5) Administrative

An exhibit showing these categories and the general construction limits can be found in the included attachments.

The current total estimate for CCOs required to modify the original scope of SSD work in these defined categories is \$ 243.8 million. This estimate is based on more detailed analysis than was available during preparation of the strategy memos and in many cases includes auditable input from the contractor as well as independent verification from Bay Area Management Consultants. The estimate in the two strategy memos for this work was \$ 255 million. Some categories have increased while others have decreased. The current estimate for the SSD contract, including the modifications to the scope of work is \$ 327.5 million, approximately \$ 6.5 million below the original estimate of \$ 334 million. This current estimate consists of the following:

Original Contract Amount	\$ 71.2 million
Baseline CCOs (1 through 48)	\$ 12.1 million
State Furnished Materials	\$ 0.4 million
Strategy memo CCOs (49 and higher)	\$ 243.8 million

Total \$ 327.5 million

Current estimates for the categories of work established in the strategy memo CCOs are addressed separately in the following sections.

### **SSD New Viaduct**



# DRAFT

### **Progress of Work**

Construction of foundations and columns are complete. Due to the revised strategy and design changes, the new viaduct structure was made to be a stand-alone structure. To accommodate this, bent caps were added between the tops of each pair of columns. The addition of the bent caps required some additional reinforcement be added to the tops of the columns. In March 2007, the Contractor began erecting the falsework in preparation of retrofitting the columns and constructing the bent caps. Demolition of the existing columns and the required modifications are complete. The construction of the bent caps is in progress.

Fabrication of the structural steel truss for the viaduct superstructure is taking place at Dongkuk S&C in South Korea. Fabrication began in November 2006 and is substantially complete with the exception of the changed work directed under CCO No. 67 to accommodate the ETI roll our/roll in design. The First shipment of steel has arrived, with the second shipment expected to arrive the beginning of November 2007. With regard to the CCO No. 67 changes, all shop drawings have been approved and material is in the process of being delivered to Dongkuk S&C for fabrication. This fabrication work is scheduled to begin in November 2007 with the third and final shipment arriving near the beginning of March 2008.

Status of Contract Change Orders: SSD New Viaduct

## Contract Change Order Implementation Strategy for South-South Detour October 30, 2007

					,						
ССО	Method of Payment	Description	Plans from Design	CT Estimate Complete	CCM Estimate Complete	HQ ATP	TBPOC Approval	HQ I&A	Target TBPOC Meeting Date	CCO Executed	Anticipated CCO Cost
49	LS	Stringer and Floor Beam Design Study	N/A	Yes	Yes	N/A	ATN April 2006	N/A	TBD	5/2/2006	\$109,000
49S1	FA	Truss Design Modifications (Changes to Stringer	N/A	Yes	Yes	N/A	ATN	Yes	TBD	8/17/2006	\$150,000
49S2	FA	and Floor Beam Connections)	N/A	Yes	Yes	IN/A	April 2006	12/08/06	100	12/18/2006	\$100,000
ubtotal (C	CCO #49 aı	nd Supplements)									\$359,000
50	FA	Stand Alone Viaduct Design	N/A	Yes	Yes			Yes		5/8/2006	\$325,000
50S1	FA			Yes	Yes	N/A	ATN	12/08/06	TBD	10/16/2006	\$300,000
50S2	FA			Yes	Yes	19/7	April 2006	2/09/07	100	12/18/2006	\$100,000
50S3	FA			Yes	Yes			2/09/01		2/13/2007	\$175,000
ubtotal (C	CCO #50 aı	nd Supplements)									\$900,000
54	LS	Deck Drainage	N/A	Yes	Yes	N/A	N/A	Yes	Done	5/2/2007	\$8,000
55	LS	Viaduct Fabricator Change (SGT Closeout)	N/A	Yes	Yes	N/A	ATP June 2007	Yes	Done	8/7/2007	\$5,665,330
55S1	LS	SGT Fabrication Closeout - Dongkuk Materials	N/A	No	No	N/A	N/A	No	TBD	No	\$500,000
58	LS	Bridge Removal Plan Conc. VIA	N/A	Yes	Yes	N/A	N/A	Yes	Done	12/14/2006	\$60,000
58S1	LS	Additional Funds Bridge. Removal Plan VIA	N/A	Yes	Yes	N/A	N/A	Yes	Done	7/20/2007	\$40,000
59	LS	Water Blast Rebar Cages	N/A	Yes	Yes	N/A	N/A	Yes	Done	2/22/2007	\$5,000
60	LS	Construction of Bent Caps	N/A	Yes	Yes	Yes 4/26/07	ATP June 2007	Yes 6/13/07	Done	6/18/2007	\$7,435,950
67	FA	Viaduct/ETI Interface Modifications (Design Cost)	N/A	Yes	Yes	N/A	N/A	Yes 5/14/07	N/A	9/27/2007	\$800,000
79	LS	Fabrication Cost for Viaduct Design Changes July '05 - October '06	N/A	Yes	Yes	N/A	ATN June 2007	Yes	Done	8/7/2007	\$803,400
79S1	LS	Fabrication Cost for Viaduct Design Changes - July 05-Oct 06	N/A	No	No	N/A	N/A	No	TBD	No	\$700,000
80	LS	Erection Costs for Viaduct Design Changes through October 2006	N/A	No	No	No	N/A	No	TBD	No	\$9,000,000
82		AC Paving and Erosion Control for Deck	No	No	No	N/A	N/A	N/A	N/A	No	\$250,000
85		Design of 300mm Waterline Relocation	N/A	Yes	Yes	N/A	N/A	N/A	N/A	No	\$10,486
87	LS	Viaduct Shipping Escalation Costs	N/A	Yes	Yes	N/A	ATN June 2007	Yes	Done	10/2/2007	\$534,570
88	LS	Viaduct Fabrication Delays	N/A	Yes	Yes	N/A	ATN June 2007	Yes	N/A	8/7/2007	\$954,460
88S1	LS	Viaduct Fabrication Delays	N/A	Yes	Yes	N/A	N/A	Yes	N/A	9/27/2007	\$776,630
96		Shotcrete Slope at Bent 48	No	No	No	No	N/A	N/A No N/A		No	\$150,000
98		Viaduct Steel Storage and Handling Cost	No	No	No	No	N/A No N/A		No	\$500,000	
99		Viaduct Erection Costs (Post Oct. 2006)	No	No	No	No	N/A	No N/A No		No	\$1,500,000
100		Viaduct Fabrication Costs (Post Oct. 2006)	No	No	No	No	N/A	No	N/A	No	\$1,500,000

ATN = Authorization to Negotiate

**Bold** = CCOs not issued yet

ATP = Authorization to Proceed

CCO #55 addressing cost associated with changing steel fabricators has been negotiated and issued for \$5,665,330. CCO #60 was issued for \$7,436,950 to construct viaduct bent caps per the design performed under CCO #50. CCO #80, addressing steel erection costs resulting from the Viaduct design changes, is currently being negotiated. A cost of \$534,570 has been negotiated for Contract Change Order #87 to address shipping escalation incurred by the Viaduct steel fabricator, Dongkuk S&C, as a result of Contract Change Orders #49 and #50. CCO #88 has been issued for \$954,460 to partially address fabrication delay costs resulting from Contract Change Orders #49 and #50. CCO #88S1 has since been negotiated for \$776,630 to address the remainder of these costs. Contract Change Orders #99 and #100 have been identified for erection and fabrication costs resulting from design changes (CCOs # 50 & 67) made after October 2006.

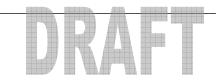
### **Budget Status**

The Viaduct portion of the SSD was bid at \$26.74M. The projected additional costs in the December 14, 2006 Strategy Memorandum were estimated to be \$9M. Currently the total additional costs associated with viaduct enhancements are approximately \$32M. In April 2006, the TBPOC approved \$1.0M for CCOs #49 and #50 and \$4.0M for the related construction. The TBPOC also approved authority to negotiate in the amount of \$8.5M for the relocation of Viaduct fabrication from China to South Korea. The originally estimated \$10.5M in closeout cost has been negotiated down to approximately \$5.665M. These added entitlement costs will be paid from previously approved supplemental funds. In June 2007, CCO #55 was presented to the TBPOC and approved. It has since been issued to the Contractor. Additionally, in May 2007, the TBPOC approved authority to negotiate in the amount of \$8.0M for construction of bent caps (CCO #60). This CCO has since been approved at the June 2007 TBPOC Meeting and issued for \$7.436M.

West Tie-In Existing Viaduct

Phase 1





### **Progress of Work**

Phase 1 work was substantially complete with the move in of the Structure on September 03, 2007. Miscellaneous electrical and drainage work remain as well as the re-construction of the westbound on-ramp approach slab bridge connection. Construction of the permanent barrier on the north side is in progress.

The Design of the westbound on-ramp approach slab bridge connection is expected to be delivered to construction by the end of October 2007.

Status of Contract Change Orders: West Tie-In Existing Viaduct (Phase 1)

CCO	Method of Payment	Description	Plans from Design	CT Estimate Complete	CCM Estimate Complete	HQ ATP	TBPOC Approval	HQ I&A	Target TBPOC Meeting Date	CCO Executed	Anticipated CCO Cost
61	FA	Advance Engineering (Work Plans and Submittals), Site Prep (Ramp Closures, Access Road), Civil Work (Grading), Structure Work (Material Procurement)	Yes	Yes	N/A	Yes	N/A	Yes 1/09/07	N/A	2/27/2007	\$400,000
61S1	LS/FA	Construction of Stage 1 Area and Substructure	Yes	Yes	Yes	Yes	ATP June 2007	Yes 5/16/07	Done	5/18/2007	\$9,995,644
Subtotal (0	CCO #61 a	nd Supplements)									\$10,395,644
66	FA	TMP - Video Equipment (WTI Phase 1)	N/A	Yes	N/A	N/A	N/A	Yes	N/A	7/20/2007	\$175,000
68	FA	Temporary Electrical Work	Yes	Yes	N/A	N/A	N/A	N/A	N/A	7/20/2007	\$140,000
68S1		Temporary Electrical Work Stage 2, 3 &4	No	No	N/A	N/A	N/A	N/A	N/A	No	\$510,000
72	LS	Structure Work (Superstructure), and Temporary Shuttle Service	Yes	Yes	Yes	Yes	ATP July 2007	Yes	Done	7/20/2007	\$11,096,900
76	LS	Labor Day Bridge Demolition and Move-In	Yes	Yes	Yes	Yes	ATP July 2007	Yes	Done	7/20/2007	\$2,240,300
76S1	LS	Labor Day Bridge Move-In (Changeable Message Signs, Temporary Signs, Traffic Control, Bridge Removal, Bridge Move-In, Paving and Roadway Repairs, CCM Support Costs, City Traffic Officers)	Yes	Yes	Yes	Yes	ATP July 2007	Yes	Done	9/27/2007	\$10,144,140
84	LS	Skid Track Foundations and Temporary Columns	N/A	Yes	Yes	N/A	ATP July 2007	Yes	Done	7/31/2007	\$3,980,000
O		r West Tie In Existing Viaduat									\$20 CO1 001

Current Forecast for West Tie-In Existing Viaduct

\$38,681,984

**Bold** = CCOs not issued yet ATN = Authorization to Negotiate ATP = Authorization to Proceed CCO #61S1 for constructing staging areas and the substructure for the Phase 1 portion of the West Tie-In has been issued for \$9,995,644. CCO #72 for the WTI Phase 1 superstructure has been issued for \$10,596,900. CCO #84 addressing the costs of temporary columns and skid track foundation has been issued for \$3,980,000. Costs for the Labor Day demolition, move-in and TMP related activities have been issued under CCO #76 S0 and S1 for \$2,240,300 and \$10,144,140, respectively.

### **Budget Status**

The estimated cost of adding the Phase 1 West Tie-In work is \$40M. The TBPOC approved authority to negotiate in the amount of \$10M for CCO #61S1 at the May 2007 TBPOC Meeting. The Department has since agreed to a \$9.995M lump sum price for CCO #61S1. This was presented to the TBPOC in June 2007 and was approved. CCOs #72, #76S0, and #84 were presented to and approved by the TBPOC at a July 2007 teleconference. The final Labor Day CCO # 76S1 was approved by the TBPOC at an August 2007 teleconference. Approximately \$38.7M is the current forecast for the various West Tie-In (Phase 1) CCOs.

West Tie-In Phase 2

2b

### Progress of Work

The foundations design for the Phase 2 work has been delivered with the complete Phase 2 design package expected in January 2008. Construction/Design Coordination meetings with the Contractor are on going.

### Status of Contract Change Orders: West Tie-In (Phase 2)

ссо	Method of Payment	L)escription	Plans from Design	Estimate	CCM Estimate Complete	HQ ATP	TBPOC Approval	HQ I&A	Target TBPOC Meeting Date	CCO Executed	Anticipated CCO Cost	
52	N/A	Elimination of Contractor's Design of Tie-Ins	N/A	N/A	N/A	Yes	N/A	Yes	N/A	3/2/2007		
62		Construction of Phase 2 WTI	No	No	No	No	N/A	No	TBD	No	\$13,000,000	
71 LS WTI Phase 2 Pile at Bent 46L/Slab Bridge Yes Yes Yes N/A N/A Yes N/A 7/20/2007 Removal										\$384,130		
Current F	Current Forecast for West Tie-In \$13,384,130											

**Bold** = CCOs not issued yet ATN = Authorization to Negotiate ATP = Authorization to Proceed CCO #52 has been executed at no cost to address designer of record issues related to the Department taking back the design of the East and West Tie-In. Cost related to construction is currently estimated at \$13.4M and will be addressed in the construction related CCOs for the individual elements.

### **Budget Status**

The Contractor's bid price for the West Tie-In was \$9.0M. Based on the Department's Strategy Memorandum, the costs associated with the Phase 2 West Tie-In work were estimated to be an additional \$13M to the original contract bid item.

East Tie-In

3

### **Progress of Work**

The complete ETI design package is expected to be delivered in March 2008 with a 65% in progress package due at the end of October 2007. Complete Bent 52A and skid bent foundation design packages are due at the end of October 2007 as well. Construction/Design Coordination meetings with the Contractor are on going.

Work to relocate the existing SFPUC sanitary sewer pump station in conflict with the ETI Bent 52A is expected to begin in November 2007. Specialized equipment and materials for the relocation have been ordered (CCO #69). Work to relocate the AT&T fiber optic duct bank is in conflict with the ETI skid bent footings is also expected to being in November 2007.

### Status of Contract Change Orders: East Tie-In

ссо	Method of Payment	Description	Plans from Design	CT Estimate Complete	CCM Estimate Complete	HQ ATP	TBPOC Approval	HQ I&A	Target TBPOC Meeting Date	CCO Executed	Anticipated CCO Cost
63		Advance Engineering (Work Plans and	N/A	Yes	N/A	N/A	N/A	Yes	N/A	9/27/2007	\$800,000
69	LS	Procurement of Pump/Control Panel for Pump Station Relocation	Yes	Yes	Yes	N/A	N/A	Yes	N/A	10/10/2007	\$111,280
69S1		Construction for Pump and Control Panel for Relocated Pump Station	Yes	No	No	No	N/A	No	N/A	No	\$488,010
90		ETI Roll-In Roll-Out	N/A	No	No	N/A	Pending	No	TBD	No	\$31,500,000
92	FA	ETI AT&T Fiber Optic Relocation	No	No	No	No	N/A	No	N/A	No	\$150,000
93		Lead Paint Mitigation Existing Truss	No	No	No	No	N/A	No	N/A	No	\$2,500,000
97		Construct Bent 52A	No	No	No	No	N/A	No	N/A	No	Estimated Cost Included in CCO #90
Current F	Forecast fo	r East Tie-In									\$35,549,290

**Bold** = CCOs not issued yet ATN = Authorization to Negotiate ATP = Authorization to Proceed

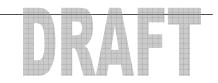
CCO #52 has been executed at no cost to address designer of record issues related to the Department taking back the design of the East and West Tie-In. The Contractor fulfilled its obligation to design the ETI. As such, the original contract allotment for this bid item will be paid and any credit to the Department will be negotiated. The changes related to construction will be addressed in the construction related CCO's for the individual elements. CCO # 93 and #97 have been identified for the initial stages of retrofit work to the existing truss to be moved out and the construction of Bent 52A for the new tie-in. The remaining ETI construction work is captured in CCO #90, which will be divided into multiple CCO's as portions of the ETI design package are delivered to construction.

### **Budget Status**

The work item for East Tie-In originally bid by the Contractor was \$6.0M. Additionally, another \$1.46M was bid by the Contractor for the demolition of the existing span moved out for the East Tie-In. The Department forecasts additional costs associated with the construction of the East Tie-In to be \$35.5M. As the work progresses and related Contract Change Orders are negotiated, the estimate will be updated.

Yerba Buena Island Transition Structures Advance Foundations





### **Progress of Work**

The current YBITS foundation and column locations being advanced are W3R/L, W4R/L, W5R/L, W6R/L, W7R/L, W7 Ramp and the temporary E.B. onramp abutment.

W3L foundation (including tie-downs) and column up to the splice zone, was completed on March 15, 2007. This work was accomplished on an accelerated schedule to accommodate the SAS Contractor's schedule for W2 bent cap construction. It is anticipated that work to complete W3L column will resume in January 2008 when this area becomes available for the construction of W3R. Work at W4 continues with the W4L footing concrete cast on October 20, 2007, and ongoing CIDH pile construction work at W4R. W6L pile driving operations began on October 10, 2007.

### Status of Contract Change Orders: YBI Transition Structures Advance Foundations

CCO	Method of	Description	Plans from	CT	CCM	HQ ATP	TBPOC	HQ I&A	Target TBPOC	CCO	Anticipated CCO
64	FA	YBITS W3L Site Prep and Grading and Construct Access Road	Yes	Yes	N/A	N/A	N/A	N/A	N/A	1/8/2007	\$150,000
64S1	LS/FA	YBITS W3L Foundation and Column to Splice Zone, Integrated Shop Drawings for W3L, Concrete Washouts, 50% of Flagging, and Traffic	Yes	Yes	Yes	Yes	ATP February 2007	Yes 3/13/07	Done	4/4/2007	\$5,835,000
Subtotal (	CCO #64 a	and Supplements)									\$5,985,000
70		Integrated Shop Drawings for Remaining YBITS Advance Locations (W3R, W4L/R, W5L/R, W6L/R, W7L/R, and W7 Ramp)	Yes	Yes	Yes	Yes	N/A	Yes 4/4/07	N/A	Yes	\$500,000
73	LS	YBITS W3R, W4R, W5R/L, W6R/L, and W7 Ramp Foundations and Columns	Yes	No	No	N/A	ATN June 2007	No	TBD	No	\$62,958,990
75	LS	YBITS W7R/L Foundations and Columns	Yes	93	No	No	ATN June 2007	No	TBD	No	\$25,000,000
77	LS	YBITS W4L Foundations and Columns	Yes	Yes	Yes	N/A	ATP July 2007	Yes 6/13/07	Done	7/20/2007	\$7,125,000
78	FA	Relocation of Sewer Force Main	Yes	Yes	Yes	N/A	N/A	N/A	N/A	7/17/2007	\$125,057
94		YBITS Temp. EB Onramp Abutment	No	No	No	No	N/A	No	N/A	No	\$1,539,000
Current Forecast for YBI Transition Structures Advance Foundations \$103,23											\$103,233,047

Bold = CCOs not issued yet

ATN = Authorization to Negotiate

ATP = Authorization to Proceed

The Department has estimated the cost of the YBITS Advance Foundations to be \$103.2M. Removal of the existing bridge is included in the current contract. However, the Department anticipates additional costs resulting from impacts of the YBITS Advance work and associated costs due to escalation. These costs will be addressed in CCO #65. Remaining YBITS CCOs include CCO #73, to be reviewed by the TBPOC with the department approved cost of \$65M, CCO #75, waiting on CC Myers estimate, and temporary abutment CCO #94.

### **Budget Status**

The construction of the YBITS Advance Foundations and Columns was estimated to cost \$110.5M. The TBPOC gave approval to negotiate a CCO for work at Bent W3L up to an amount not to exceed \$7M. Contract Change Orders #64 and #64S1 have been issued for a total of \$5.985M. These Contract Change Orders were presented to and approved by the TBPOC at the February 2007 Meeting. CCO #77 for work at W4L was presented to the TBPOC at a July 2007 teleconference and subsequently approved. As the work progresses and the related Contract Change Order is negotiated, this estimate will be updated.

### Administrative Issues



### Progress of Work

Administrative issues that remain on the SSD contract are related to setting project milestones and determining time related overhead resulting from the contract time extensions, escalation costs, and other necessary changes to the contract. Additionally, costs for implementing COZEEP for the East and West Tie-Ins need to be accounted for.

The following list of milestones has been provided to the Contractor to incorporate into the project schedule:

	Date	Status	Notes
W3L Complete	March 15th, 2007	Complete	finished 3/15/07
West Tie-In Phase 1 Viaduct Demo/Roll-In Complete	September 4th, 2007	Complete	finished 9/04/07
Access to W3R Available to CCM	January 2nd, 2008		
W3R, W4L/R, W6L/R, and W7L/R/Ramp Complete	December 31st, 2008		
Upper East Tie-In Area Available to CCM	April 2nd, 2009		
East Tie-In Roll-Out/Roll-In Complete	May 26th, 2009		
Frame 1 YBITS Area (Bent 7 West) Vacated by CCM	September 1st, 2009		
Project Completion	December 31st, 2009		

The Department has established a new completion date of September 2009 and is negotiating for an equitable revised Time Related Overhead rate. Costs related to escalation and NOPC issues are also being negotiated with the Contractor. NOPC's with significant exposures include issues on the East Tie-In Design Criteria (NOPC #3, \$4.3M), Viaduct Segment Bearings Changes (NOPC #8, \$658K), and Design Submittal Review (NOPC #16, \$2.1M).

Status of Contract Change Orders: Administrative Issues

CCO	Method of	Description	Plans from		CCM	HQ ATP	TBPOC	HQ I&A	Target TBPOC	CCO	Anticipated CCO
51		NOPC 12 & 13 Resolution	N/A	N/A	N/A	Yes	N/A	Yes	N/A	8/17/2006	\$25,234
53		Handling and Storage of Material	N/A	N/A	N/A	Yes	N/A	Yes	N/A	12/8/2006	\$240,000
56		Imbsen Claim Settlement	N/A	Yes	Yes	N/A	Pending	No	TBD	No	\$6,300,000
57	LS	Demolition of Building 206	N/A	Yes	Yes	N/A	N/A	N/A	N/A	10/18/2006	\$22,378
57S1	LS	Remove and Clear Building 254	N/A	Yes	Yes	N/A	N/A	N/A	N/A	6/4/2007	\$10,572
65		Demolition of Existing Bridge	No	No	No	No	June	No	TBD	No	\$3,500,000
86	LS	Additional Suspension Costs	N/A	No	No	N/A	N/A	No	N/A	No	\$100,000
91	91 LS Contract Days Extension/TRO Compensation		N/A	Yes	N/A	N/A	Pending	Yes	TBD	No	\$1,818,948
		Contract Days Extension/TRO Compensation 670 days to September 2009	N/A	Yes	N/A	N/A	Pending	Yes	TBD	No	\$8,463,159
Current Fo	recast for A	dministrative									\$20,480,291

**Bold** = CCOs not issued yet ATN = Authorization to Negotiate ATP = Authorization to Proceed

The original contract allotment provided \$1.3M for COZEEP. However, with two full bridge closures planned additional funds will be required. The added COZEEP will not result in a Contract Change Order and is shown here to capture costs to the project. CCO #24S3 has been voided and TRO related costs will now be addressed under CCO #91 and its supplements.

### **Budget Status**

Costs of \$44.3M have been estimated for additional Time Related Overhead, escalation issues, and undefined risk items. As Contract Change Orders for these items are negotiated, the original estimate will be updated. Costs related to settlement of NOPC issues will be paid out of the contract contingency.



## **BUDGET SUMMARY**

## **Status of Changes on SSD Contract (August 2007):**

	Scope of Work	Current Forecast
(0)	Original Bid Items + Previouis CCO's	\$83.7
(1)	SSD New Viaduct	\$32.5
(2a)	West Tie-In Existing Viaduct Phase 1	\$38.7
(2b)	West Tie-In Phase 2	\$13.4
(3)	East Tie-In	\$35.5
(4)	YBI Transition Structures Advance Found	\$103.2
(5)	Administrative Issues	\$20.5
	Total	\$327.5

## ITEM 5: SAN FRANCISCO-OAKLAND BAY BRIDGE UPDATES

- a. Yerba Buena Island
- 2) Contract Change Orders
  - a) CCO No. 91 S1

Change Requested by:

### CONTRACT CHANGE ORDER

Suppl. No. 1 Contract No. 04 - 0120R4 Road SF-80-12.6/13.2 FED. AID LOC.: ACBRIM-080-1(097)N

To: CC MYERS INC

CCO 91

You are directed to make the following changes from the plans and specifications or do the following described work not included in the plans and specifications for this contract.

NOTE: This change order is not effective until approved by the Engineer.

Description of work to be done, estimate of quantities and prices to be paid. (Segregate between additional work at contract price, agreed price and force account.) Unless otherwise stated, rates for rental of equipment cover only such time as equipment is actually used and no allowance will be made for idle time. This last percentage shown is the net accumulated increase or decrease from the original quantity in the Engineer's Estimate.

In assuming full responsibility for the design of the East Tie In and West Tie In and in ordering design enhancements to the Viaduct of the Temporary Bypass Structure, the Department acknowledges significant Department caused delays to the contract completion. The Department also acknowledges the temporary suspension of the work that was in effect from April 17, 2006 through January 12, 2007 which contributed to this delay.

This change order provides a contract time extension of 670 working days for these Department delays.

This contract time extension, along with the temporary suspensions of work recognized under Change Order No. 14 and Change Order No. 24 and the contract time extension granted under Change Order No. 24, Supplement No. 2 and the original Change Order No. 91, acts to extend the contract date of completion to September 1, 2009.

Upon a Department commitment to a delivery date for the design of the East Tie In structure and the establishment of a fabrication, erection and installation schedule for that structure, the full extent of the Department delays shall be determined and a commensurate time extension shall be granted in order to establish an actual contract completion date.

#### **Adjustment of Compensation at Lump Sum:**

In accordance with Section 10-1.20 "Time-Related Overhead" of the contract Special Provisions, the lump sum price for Contract Bid Item No. 8, "Time-Related Overhead" shall be adjusted by \$12,631.58 per working day for each of the 670 working days that the contract time is extended under this change order. The Contractor's Time-Related Overhead rate is currently being audited due to the change in scope of work for the Contract. This item is subject to further adjustment in accordance with the results of the audit.

Cost of Adjustment of Compensation at Agreed Unit Price:

670 working days @ \$12,631.58 per working day = □ □ \$8,463,158.60

This lump sum shall be adjusted for time-related overhead payments in excess of 149 percent of the Contractor's lump sum price bid for Contract Bid Item No. 8 "Time Related Overhead". This adjustment shall be performed in accordance with Section 10-1.20 "Time-Related Overhead" of the contract Special Provisions.

This change order does not address any outstanding costs, other than time related overhead, incurred as a result of the Department delays and suspension to the work and this change order doesn't preclude the Contractor from pursuing these costs.

Total Cost of Adjustment of Compensation at Lump Sum ......\$8,463,158.60

**CONTRACT CHANGE ORDER** 

Change Requested by:

Decrease \$8,463,158.60

Engineer

cco 9	1	Suppl. No. 1	Contract No. 04 - 0120R4	Road SF-80-12.6/13.2	FED. AID LOC.: ACBRIM-080-1(097)N

By reason of this order the time of completion	will be adjusted as follows: 670 days	
Submitted by		
Signature	Resident Engineer BILL CASEY	Date
Approval Recommended by		
Signature	SFOBB Construction Manager MIKE FORNER	Date
Engineer Approval by		
Signature	SFOBB Construction Manager MIKE FORNER	Date

Estimated Cost: Increase

We the undersigned contractor, have given careful consideration to the change proposed and agree, if this proposal is approved, that we will provide all equipment, furnish the materials, except as may otherwise be noted above, and perform all services necessary for the work above specified, and will accept as full payment therefor the prices shown above.

NOTE: If you, the contractor, do not sign acceptance of this order, your attention is directed to the requirements of the specifications as to proceeding with the ordered work and filing a written protest within the time therein specified.

Contractor Acceptance by		
Signature	(Print name and title)	Date

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

### CONTRACT CHANGE ORDER MEMORANDUM

TO: MI	IKE FOF	RNER / D	ENNIS TURCHO	)N		FILE: E.A.	04 - 0120R4				
						CO-RTE-PM	SF-80-12.6/13.2				
FROM:	BILL CA	ASEY				FED. NO.	ACBRIM-080-1(097)N				
CCO#:	91	SUPPL	EMENT#: 1	Categor	y Code: CHPX	CONTINGENCY BALANCE (incl. this change) \$28,378,491.08					
COST:	\$8,4	63,158.	60 INCF	REASE 🗹	DECREASE	HEADQUARTE	RS APPROVAL REQUIRE	ED? VES NO			
SUPPLE	MENTA	L FUNDS	PROVIDED:	The second secon	\$0.00		EST IN ACCORDANCE W	ITH 🗹 YES 🗌 NO			
CCO DES	SCRIPT	ION:				PROJECT DES	CRIPTION:				
Late 2009	9 Time E	Extension				CONSTRUCT ROUTE 80 TEMP BYPASS STRUCTURE					
Original Contract Time: Time Adj. This Change: Previously Approved Contract Time Adjustments:							entage Time Adjusted: ding this change)	Total # of Unreconciled Deferred Time CCO(s): (including this change)			
	<b>475</b> Day(s) <b>670</b> Day(s) <b>381</b> D					ıy(s)	221 %	7			

DATE: 10/17/2007

Page 1 of 2

#### THIS CHANGE ORDER PROVIDES FOR:

a 670 working day time extension to the contract completion.

This contract calls for the construction of a temporary detour for both eastbound and westbound I-80 traffic that allows for the tie in of the east span of the new San Francisco Oakland Bay Bridge (SFOBB) to Yerba Buena Island. The detour consist of three main structures, the east tie in (ETI) to the bridge, the west tie in (WTI) to the island and the viaduct structure between the two tie ins. The contract was awarded as a performance based project, with the contractor responsible for meeting the design criteria specified in the contract

A December 14, 2006 Department Strategy Memo, approved by Richard Land and Tony Anziano, called for the Department to assume responsibility for the design of the ETI and WTI structures and to order design enhancements to the steel viaduct. The strategy memo recognized that these actions would likely extend the contract completion into 2010 which represents an approximate 3 year extension in contract time.

On February 15, 2007, the Toll Bridge Program Oversight Committee (TBPOC) approved implementation of the strategy outlined in the December 14, 2006 strategy memo.

The original Change Order No. 91 provided a 144 day time extension that extended the contract completion to November 1, 2007 to allow for the payment of time related overhead through this period.

As of October 2007, the full extent to the project schedule due to the actions mandated by this memo have yet to be fully determined. The current controlling operation pertains to the delivery of the design of the ETI structure. A design delivery of March 2008 has been tentatively established while the work pertaining to the fabrication and erection of the structure and the tie in of the structure to the existing bridge continue to be evaluated. It is anticipated that these issues may be resolved in the coming months.

The purpose of this change order is to provide the minimum time extension that the Department shall be responsible for in order to provide a completion date that more accurately reflects the project schedule realities.

This change order provides for an additional 670 working day time extension that will extend the contract completion date through September 1, 2009 and allow for time related overhead payments through this date. The September 1, 2009 completion represents a best case scenario for the Department based upon an early ETI design delivery and the development of shop drawings and the procurement of raw materials for the fabrication being performed concurrently with the completion of the design.

Once the full effect of the ETI design delivery, fabrication, erection and installation on the contract completion is established, a separate change order shall be issued to provide for the full time extension resulting from the Department's actions based on Section 10-1.19 "Progress Schedule (Critical Path Method) of the contract Special Provisions.

### CONTRACT CHANGE ORDER MEMORANDUM

EA: 0120R4 CCO: 91 - 1

DATE: 10/17/2007 Page 2 of 2

Compensation for time related overhead costs shall be paid as an adjustment of compensation at an agreed lump sum of \$8,463,158.60. This sum is based upon a rate of \$12,631.58 per working day as calculated from Contract Bid Item No. 8 "Time-Related Overhead" in accordance with Section 10-1.20 "Time-Related Overhead" of the contract Special Provisions. The change order shall be financed from the contract's contingency funds.

The change order also requires the adjustment of time related overhead payments in excess of 149 percent of the Contractor's lump sum price bid for Contract Bid Item No. 8. This adjustment shall be performed through a supplemental change order based upon documented costs incurred in accordance with Section 10-1.20 of the contract Special Provisions.

This change order does not address any outstanding costs, other than time related overhead, incurred as a result of the Department delays and suspension to the work and this change order doesn't preclude the Contractor from pursuing these costs.

Maintenance concurrence is not required as this is an administrative change.

CONCURRED BY:				ESTIMATE OF COS	T	
Construction Engineer:	Mahantesh Anigol	Date		THIS REQUEST	TOTAL TO DATE	
Bridge Engineer:		Date	ITEMS FORCE ACCOUNT	\$0.00 \$0.00	\$0.00 \$0.00	
Project Engineer:		Date	AGREED PRICE	\$0.00	\$0.00	
Project Manager:	Alec Melkonians	Date	ADJUSTMENT	\$8,463,158.60	\$10,282,106.12	
FHWA Rep.:		Date	TOTAL	\$8,463,158.60	\$10,282,106.12	
Environmental:		Date	FEDERAL PARTICIPATION			
Other (specify):		Date	PARTICIPATING NON-PARTICIPATII	PARTICIPATING NG (MAINTENANCE)	IN PART ☐ NONE  ✓ NON-PARTICIPATING	
Other (specify):	Robert Kobal, HQ Asst.Const.Coor	Date	FEDERAL SEGREGATION	ON (if more than one Fu	unding Source or P.I.P. type)	
District Prior Approval By:		Date	✓ CCO FUNDED PER CONTRACT CCO FUNDED AS FOLL			
HQ (Issue Approve) By:	Ken Darby, HQ CCO Engineer	Date	FEDERAL FUNDING	SOURCE	PERCENT	
Resident Engineer's Signature:		Date				

## ITEM 5: SAN FRANCISCO-OAKLAND BAY BRIDGE UPDATES

- a. Yerba Buena Island
- 2) Contract Change Orders
  - b) CCO No. 73

### CONTRACT CHANGE ORDER

Change Requested by:

Engineer

CCO 73 Suppl. No. 0 Contract No. 04 - 0120R4 Road SF-80-12.6/13.2 FED. AID LOC.: ACBRIM-080-1(097)N

#### To: CC MYERS INC

You are directed to make the following changes from the plans and specifications or do the following described work not included in the plans and specifications for this contract.

NOTE: This change order is not effective until approved by the Engineer.

Description of work to be done, estimate of quantities and prices to be paid. (Segregate between additional work at contract price, agreed price and force account.) Unless otherwise stated, rates for rental of equipment cover only such time as equipment is actually used and no allowance will be made for idle time. This last percentage shown is the net accumulated increase or decrease from the original quantity in the Engineer's Estimate.

#### **Extra Work at Lump Sum:**

Perform the following work as described under Items No. 1 through 10 below in accordance with the plans and specifications shown on Sheets No. 3 through 280 of this change order:

- 1) Complete the construction of the portion of the Bent W3L column of the YBI Transition Structure (Br. No. 34-0006 L) that was excluded from Change order No. 64, Supplement No. 1.
- 2) Construct the footings and columns for Bent W3R, Bent W4R, Bent W6L and Bent W6R of the YBI Transition Structure (Br. No. 34-0006 L/R).
- 3) Construct the footings and columns for Bent W7 of the YBI EB On-Ramp Structure (Br. No. 34-0006 R).
- 4) Construct the footings and columns for Bent W5L and Bent W5R of the YBI Transition Structure (Br. No. 34-0006 L/R).
- 5) Construct Drainage Systems No. 1, No. 5, No. 6 No. 7 and No. 8.
- 6) Construct the electrical duck bank and compressed air line including all appurtenances.
- 7) Furnish and install all temporary signing and traffic handling measures as specified.
- 8) Perform all electrical work specified.
- 9) Reconstruct the M2 Line roadway as specified.
- 10) Perform all other work designated on the plans and specifications to be performed on this change order.

For the work concerning Items No. 1 through 10 above, the Contractor shall be compensated a lump sum of \$62,958,990.00. This sum constitutes full and final compensation, including all markups, for all costs associated with the work of this change except for the 4 items of work specifically excluded below:

- 1) All work associated with the implementation and maintenance of the Contractor's Storm Water Pollution Prevention Plan and erosion control, excluding concrete washouts, shall be paid by the Department separately from this change order.
- 2) Flagging costs associated with this work shall be paid under Change Order No. 1 with these costs being paid at 50% by the Department. The remaining flagging costs are considered to be included in the lump sum payments made under this change order.
- 3) Any time related overhead costs resulting from this change order shall be addressed separately as they pertain to the adjustment of Contract Bid Item No. 8 "Time Related Overhead".
- 4) All work associated with the placement of 150 mm cast iron pipe and the performance of any sewer video survey shall be compensated separately from this change order.

### CONTRACT CHANGE ORDER

Change Requested by:

Engineer

Contract No. 04 - 0120R4 FED. AID LOC .: ACBRIM-080-1(097)N CCO 73 Road SF-80-12.6/13.2 Suppl. No. ()

It is understood as part of this change order that the Department may elect to remove the work concerning the construction of Bent W5L and Bent W5R (Item No. 4 of 10 above) that cannot be performed prior to the removal of Pier YB-3 of the existing structure. In the event this work is eliminated, the Contractor shall credit the Department a lump sum of \$5,367,650. This lump sum credit is contingent upon all Bent 5WL and 5WR steel HP 360X196 piles being furnished and driven. In the event these piles, or a portion of these piles, are not furnished or driven, an additional credit shall be provided to the Department commensurate to the value of the work not performed.

In the event the work concerning the construction of Bent W5L and Bent W5R is eliminated, any credit owed to the Department shall be taken through a supplemental change order.

The plans and specification of this change order incorrectly make reference to or list themselves as Change Order No 64. These references should be interpreted to be part of this change order.

Any payment clauses contained within the specifications of this change order are superseded by the payment clauses concerning the agreed lump sum payment noted above.

All work shall be performed in accordance with the contract documents.

	Estimated Cost: Increase 🗹 Decrease	\$62,958,990.00
By reason of this order the time of completion will be Submitted by	e adjusted as follows: Deferred	
Signature	Resident Engineer BILL CASEY	Date
Approval Recommended by		
Signature	SFOBB Construction Manager MIKE FORNER	Date
Engineer Approval by		
Signature	SFOBB Construction Manager MIKE FORNER	Date

We the undersigned contractor, have given careful consideration to the change proposed and agree, if this proposal is approved, that we will provide all equipment, furnish the materials, except as may otherwise be noted above, and perform all services necessary for the work above specified, and will accept as full payment therefor the prices shown above.

NOTE: If you, the contractor, do not sign acceptance of this order, your attention is directed to the requirements of the specifications as to proceeding with the ordered work and filing a written protest within the time therein specified.

Contractor Acceptance by					
Signature	(Print name and title)	Date			
		1			

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

### CONTRACT CHANGE ORDER MEMORANDUM

TO: MIKE FORNER / DENNIS TURCHON		FILE: <b>E.A.</b> 04 - 0120R4					
FROM: BILL CASEY			FED. NO.	SF-80-12.6/13.2 ACBRIM-080-1(097)N			
CCO#: <b>73</b>	SUPPLEM	ENT#: <b>0</b>	Categor	y Code: BZZZ	CONTINGENCY	BALANCE (incl. this cha	nge) <b>\$121,569,501.08</b>
COST: \$62,958,990.00 INCREASE ✓ DECREASE □			HEADQUARTER	RS APPROVAL REQUIRE	ED? YES NO		
SUPPLEMENTAL FUNDS PROVIDED: \$0.00			IS THIS REQUEST IN ACCORDANCE WITH ✓ YES ☐ NO ENVIRONMENTAL DOCUMENTS?				
CCO DESCRIPTION: YBITS Advance Work Footing W4L			PROJECT DESCRIPTION: CONSTRUCT ROUTE 80 TEMP BYPASS STRUCTURE				
Original Contract Tir	me: Ti	me Adj. This Ch	ange:	Previously Approved ( Time Adjustments:			Total # of Unreconciled Deferred Time CCO(s): (including this change)
475	Day(s)	DEF	Day(s)	381 D	ay(s)	80 %	8

DATE: 10/22/2007

Page 1 of 2

#### THIS CHANGE ORDER PROVIDES FOR:

the advance construction of numerous footings and columns for the Yerba Buena Island Transition Structures (YBITS) of the San Francisco Oakland Bay Bridge.

This contract provides for the construction of a temporary detour for both eastbound and westbound I-80 traffic that allows for the tie in of the east span of the new San Francisco Oakland Bay Bridge (SFOBB) to Yerba Buena Island. The detour will allow for the construction of the permanent structure, YBITS, that connects the signature SAS structure to Yerba Buena Island.

The construction of the transition structure is scheduled to be performed after the completion of this project. In order to advance a portion of the YBITS work and potentially allow for an early opening of the new SFOBB, the Department issued a December 25, 2006 memorandum recommending a portion of the YBITS foundation work be performed under this contract by change order. The memorandum was approved by Tony Anziano, Toll Bridge Program Manager, and Richard Land, Chief Engineer.

This change order implements the bulk of the work recommended under this memorandum. Previously executed Change Orders No. 64, No. 64 - Supplement No. 1, and No. 77 provided for the construction of a portion of Bent W3L and the construction of Bent W4L associated with the YBITS structure.

This change order provides for the construction of the remaining portion of Bent W3L and the construction of seven (7) other bents of the YBITS (Bents W3R, W4R, W5 R & L, W6 R & L and Bent W7 of the EB On-Ramp Structure. This change order also calls for miscellaneous drainage, roadway and electrical facilities to be constructed in the vicinity of the footing and column work being performed.

The only remaining work to be implemented from the December 25, 2006 memorandum, after this change order, concerns Bent W7 (excluding the EB On-Ramp Structure) that will be issued under a forthcoming change order (CCO No. 75).

Compensation for this work shall be paid as extra work at an agreed lump sum of \$62,958,990.00 which shall be financed from the contract's contingency funds. A cost analysis is on file.

SWPPP, erosion control, time related overhead, placing 150 mm cast iron pipe and any video surveying costs are excluded from this change order and shall be paid separately.

Adjustment of contract time is deferred as the work may affect the controlling operation.

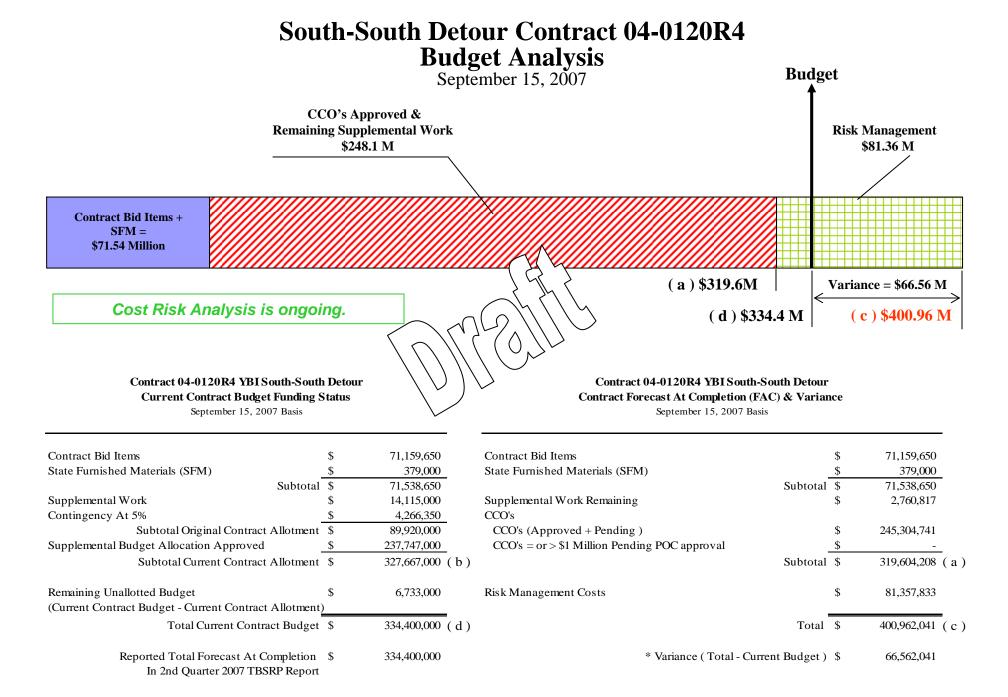
EA: 0120R4 CCO: 73 - 0

DATE: 10/22/2007 Page 2 of 2

CONCURRED BY:					ESTIMATE OF COST	
Construction Engineer:	Mahantesh Anigol	Date			THIS REQUEST	TOTAL TO DATE
Bridge Engineer:	Tom Ostrom, OSD	Date		ITEMS	\$0.00	\$0.00
Project Engineer:	Trinh Lai	Date	6/7/07	FORCE ACCOUNT AGREED PRICE	\$0.00 \$62,958,990.00	\$0.00 \$62,958,990.00
Project Manager:	Ken Terpstra	Date	6/7/07	7 ADJUSTMENT \$0.00		\$0.00
FHWA Rep.:		Date		TOTAL	TOTAL \$62,958,990.00	
Environmental:		Date		FEDERAL PARTICIPATION		
Other (specify):	Robert Kobal, HQ Asst.Const.Coor		3/14/07	□ PARTICIPATING □ NON-PARTICIPATIN	PARTICIPATING IN PAGE (MAINTENANCE)	ART □ NONE  NON-PARTICIPATING
Other (specify):	Bill Zanetich, Maintenance	Date	6/28/07	· · · · · · · · · · · · · · · · · · ·		
District Prior Approval By:		Date		CCO FUNDED PER CONTRACT CCO FUNDED AS FOLLOWS		
HQ (Issue Approve) By:	Ken Darby, HQ CCO Reviewer	Date		FEDERAL FUNDING S	SOURCE	PERCENT
Resident Engineer's Signature:		Date				
				and 100		

# ITEM 5: SAN FRANCISCO-OAKLAND BAY BRIDGE UPDATES

- a. Yerba Buena Island
- 3) Budget Balance Beam



# ITEM 5: SAN FRANCISCO-OAKLAND BAY BRIDGE UPDATES

b. SAS and OTD General Update



TO: Toll Bridge Program Oversight Committee DATE: October 23, 2007

(TBPOC)

FR: Tony Anziano, Toll Bridge Program Manager, Caltrans

RE: Agenda No. - 5b

San Francisco-Oakland Bay Bridge Updates

Item- SAS and OTD General Update

### **RECOMMENDATION:**

For Information Only

### **DISCUSSION:**

An update on SAS and Oakland Touchdown will be provided at the meeting. A presentation will be provided highlighting work being done in China.

### Attachment(s):

N/A

# ITEM 5: SAN FRANCISCO-OAKLAND BAY BRIDGE UPDATES

c. Project-Specific Insurance



TO: Toll Bridge Program Oversight Committee DATE: October 23, 2007

(TBPOC)

FR: Tony Anziano, Toll Bridge Program Manager, Caltrans

RE: Agenda No. - 5c

San Francisco-Oakland Bay Bridge

Item- Project Specific Insurance

#### **Recommendation:**

AUTHORIZE negotiation of a new project specific insurance policy at a total cost of up to \$7.7 million.

### **Cost:**

\$7.7 million

### **Schedule Impacts:**

N/A

### **Discussion:**

The following will summarize the background, key issues, options, and cost to replace the project specific professional liability insurance policy procured for the San Francisco Oakland Bay Bridge (SFOBB) East Span Seismic Safety Project (ESSSP).

### Background

In December 1998, a project-specific professional liability insurance policy was procured to cover the design contracts for the SFOBB seismic renovation projects through Ty Lin/Moffatt Nichol joint venture (JV) including 50-60 of their sub-consultants. This twelve year policy, set to expire on 12/17/2010, contains limits of \$50,000,000 per occurrence and \$50,000,000 aggregate for a premium of \$1,485,000. The policy term was based on a project schedule that anticipated project completion as early as 2006. The policy premium was split by the Department and the JV (70% / 30% respectively) and was based on \$1,800,000,000 in construction value, auditable at a rate of 0.825 per \$1,000 in construction value (if construction value increases, which it has, the premium increases according to the rate specified).

The policy covers bodily injury, property damage, claims expenses, and defense costs pertaining to alleged errors, acts, or omissions from failing to render professional services a reasonable professional service firm would provide in the same or similar circumstances. For claims to be considered under the policy, they must be made after the retroactive date of 12/17/1998 but



before the expiration date of 12/17/2010. The most likely sources of claims will come from: (a) contractors alleging cost overruns and time delays and/or (b) third party individuals, such as the traveling public. Construction claims may name the design team who look to their professional liability policy to defend the claim(s) and to fund any settlements arising from such claim(s). The Department is an additional insured under this policy through an owner's indemnity endorsement which allows the Department to recover any defense costs and related judgments which may arise from claims against the JV. Therefore, the current carrier could assert that the Department is not be able to utilize this policy to recover monies from design disputes with the JV or its sub-consultants for this work.

#### **Key Issues**

There are a number of time-sensitive issues pertaining to this insurance policy. First and most importantly, due to the fact that the policy term was based on a schedule that has been superseded, the policy will expire long before the ESSSP work is accepted and completed. The Department needs to decide how it will fund any professional liability claims which may arise after 2010 during the construction phase and finally when the new East Span is open to the traveling public. Letting this policy expire will leave the JV without a financial mechanism to fund any professional liability claims arising from the East Span project. It will also leave the Department and TBPOC funding partners with unknown liabilities pertaining to such claims since it is likely these entities will also be named in any construction-related suit.

Second, if the policy remains in force until 2010, the Department and JV will owe the insurance company roughly \$2,500,000 in additional premium as construction values in place as of 12/17/2010 will greatly exceed the original policy estimate of \$1,800,000,000. Consequently, this will leave the Department and JV without any coverage after 2010 and sunk costs of approximately \$4,000,000 (\$1,485,000 policy premium plus estimated \$2,500,000 final audit premium).

Third, the JV and its sub-consultants' insurance companies have excluded all work pertaining to the SFOBB East Span project from its practice professional liability insurance policies as a project-specific policy is in place. Coverage cannot be added to the JV's professional liability policy or its sub-consultants' policies. The JV has repeatedly expressed concern over pressure from its sub-consultants to resolve the issue of the professional liability policy now.

Finally, the insurance company, Lexington Insurance Company (subsidiary of AIG), will not extend the existing policy beyond 2010 with the same limits and pricing due to the current restrictive professional liability market. Lexington has offered, however, to cancel the current policy, waive any final audit, preserve the 1998 retroactive date, and re-write a new policy for a 10 year term. This new policy will cover all design-related work from 1998 – 2017. They offer this option now and not in 2008, 2009, or 2010.

### **Options Considered**

1. **Do Nothing.** The Department and the JV will face an additional premium of roughly \$2,500,000 in 2010 and receive no coverage for claims made after 12/17/2010. This will leave the Department and JV with sunk costs of \$4,000,000 without any funding mechanism to pay for professional liability claims.



- 2. **Wait Until 2010 to Negotiate New Terms.** Recent discussions with Lexington indicated they would not extend the current policy and they would not negotiate a new policy in 2010. They have no incentive to offer renewal terms in 2010 since they will collect a large additional audit premium while being "off" the risk entirely. Waiting until 2010 to negotiate with a different insurance company is impractical and cost-prohibitive since no insurer in the world will preserve a retroactive coverage date of 1998 to cover the entire project at a reasonable premium. If a new policy was negotiated in 2010 with a different insurance company, the new retroactive date would be 2010 which gives the JV and the Department little coverage as most of the design work occurred 1998 2010. A retroactive date of 2010 eliminates 12 years of design work as professional services occurring before the retroactive date are not covered.
- 3. **Procure a New Policy With a Different Insurance Company.** The world-wide insurance market for project professional liability insurance is very limited and restrictive. In the late 1990s, insurance companies underwrote many project policies only to suffer major losses on such policies years later. The most recent major loss affecting professional liability insurance capacity is the Big Dig project in Boston. Professional liability insurance capacity was recently tested by our OCIP insurance broker, Willis Insurance Services in San Francisco. They searched worldwide for an insurer to replace this policy only to receive consistent declinations. This leaves the Department with Lexington as the only option, worldwide, to insure this project.
- 4. **Let the Policy Expire in 2010 and Self-Insure the Risk.** The Department and JV may face large unknown future liabilities from this option. The potential for professional liability claims escalate as (a) construction approaches completion (cost overruns and recapture of costs from time delays) and, (b) the traveling public is allowed onto the new structure. The JV and its sub-consultants cannot self-insure such risks as they do not have the financial capacity to do so. They are also not able to buy their own insurance to cover this risk. No insurance also puts the JV in violation of their agreement with their sub-consultants. No insurance places the Department and its funding partners with unknown liabilities for such claims.
- 5. **Re-Negotiate a Replacement Program with Lexington Now.** This option allows the Department, the JV and its sub-consultants, and TBPOC funding partners to eliminate uncertainty and establish a secure funding mechanism to fund any professional liability claims over the next 10 years. Please refer to the attached "Replacement Terms and Cost" sheet which summarizes AIG and its related subsidiaries' recent offer to replace this policy. It should be noted that the current level of coverage (\$50 million) simply is not available the closest comparable coverage is limited to \$40 million and is achieved in layers of coverage rather than a single policy.

The Department's insurance specialist is recommending that the TBPOC approve Option #5. This option, although considerably more expensive than the current policy, serves as the most prudent risk management tool to eliminate uncertainty pertaining to professional liability claims. Re-negotiating now will eliminate the expense of a large final audit as AIG has agreed to waive such audit if a new policy is procured today. Further, AIG is the only insurer in the world to offer replacement terms and the only insurer to preserve the critical retroactive date of 1998 which gives all parties continuous coverage from the inception of the project. Re-negotiating now



allows the Department to leverage the large final audit premium into continuous coverage for the remainder of the construction period and three years after work is completed when, statistically, most professional liability insurance claims arise. Re-negotiating a replacement policy now preserves our original agreement with the JV to procure this insurance and preserves the JV's agreement with its sub-consultants to maintain such insurance.





## Ty Lin/Moffat Nichol JV, Et Al SFOBB Project Professional Liability Insurance Policy Replacement Terms and Cost

Coverage: Professional liability covering Ty Lin/Moffat Nichol Joint Venture and its sub-

consultants' negligent errors, acts, or omissions in the course of rendering professional services for the SFOBB East Span Replacement Project. The State of California is an "additional insured" under the policy (via an

indemnity endorsement).

**Revised Policy Term:** 12/1/2007 – 12/1/2017

**Retroactive Date: 12/17/1998 (full prior acts)** 

Form: Claims-Made

### **Insurance Companies:**

Primary and First Excess Layer - Lexington Insurance Company

• Second Excess Layer - AIG Excess Liability Insurance Company, Ltd. (Both wholly-owned subsidiaries of American International Group "AIG")

Policy Terms: No change with the exception of a semi-annual reporting requirement

pertaining to cost over runs and time delays

Total Limits: \$40,000,000 Per Occurrence/\$40,000,000 Total Aggregate:

• Primary Layer: \$15,000,000 – Lexington Insurance Company (US)

• First Excess Layer: \$10,000,000 – Lexington Insurance Company (London)

Second Excess Layer: \$15,000,000 – AIG Cat Excess Liability Insurance Company

**Self-Insured Retention:** \$500,000 per occurrence

#### **Premium:**

Primary Layer: \$ 5,250,000
 First Excess Layer: \$ 2,625,000
 Second Excess Layer: \$ 2,650,000

Total \$10,525,000 (plus 3.25% taxes and fees)

# ITEM 5: SAN FRANCISCO-OAKLAND BAY BRIDGE UPDATES

d. Jones Act



TO: Toll Bridge Program Oversight Committee DATE: October 23, 2007

(TBPOC)

FR: Tony Anziano, Toll Bridge Program Manager, Caltrans

RE: Agenda No. - 5d

San Francisco-Oakland Bay Bridge Updates

Item- Jones Act

### **RECOMMENDATION:**

For Information Only

### **DISCUSSION:**

An update on the Jones Act will be provided at the meeting.

### Attachment(s):

N/A

# ITEM 5: SAN FRANCISCO-OAKLAND BAY BRIDGE UPDATES

e. Skyway Project Closeout



TO: Toll Bridge Program Oversight Committee DATE: October 23, 2007

(TBPOC)

FR: Tony Anziano, Toll Bridge Program Manager, Caltrans

RE: Agenda No. - 5e

San Francisco-Oakland Bay Bridge Updates

Item- Skyway Project Closeout

### **RECOMMENDATION:**

For Information Only

### **DISCUSSION:**

An update on the Skyway Project closeout will be provided at the meeting.

### Attachment(s):

N/A

## ITEM 6: NEW BENICIA-MARTINEZ BRIDGE

a. BASE Security System



TO: Toll Bridge Program Oversight Committee DATE: October 23, 2007

(TBPOC)

FR: Andrew Fremier, Deputy Executive Director, BATA

RE: Agenda No. - 6a

New Benicia-Martinez Bridge

BASE Security System

### Recommendation:

APPROVE transfer of \$3.0 million in available contract contingency funds from the New Benicia-Martinez Bridge Contract (04-00603\_) to a Director's Order to install the Bay Area Security Enhancement (BASE) System on the new bridge (04-4A740\_).

### **Cost Impacts:**

The total cost of the BASE cameras is \$3.0 million (\$2.0 M – CO and \$1.0 – COS). There are sufficient available remaining contract contingency funds from the new bridge contract to fund the transfer.

### **Schedule Impacts:**

The new bridge was opened to traffic on August 25, 2007. BASE cameras will be installed at various locations around the bridge and should not impact traffic.

### **Discussion:**

The California Highway Patrol has been working with the Department's District 4 Maintenance staff to develop and design a security plan for the new bridge, as part of the overall Bay Area Security Enhancement (BASE) Project. The plan would install a number of cameras and other security measures around the bridge.

The Department has requested an allocation of \$3,000,000 to fund the installation of the BASE system on the New Benicia-Martinez Bridge. The contract would be advertised as a "Director's Order" to expedite the work.

BATA proposes to transfer previously allocated and available Regional Measure 1 funds from the New Bridge Contract (04-00603\_) to the BASE Security Camera Contract (04-4A740\_). The transfer will not impact the overall budget for the New Benicia-Martinez Bridge Project.

Other remaining project work includes the existing bridge modification contract, which opens bids on October 31, 2007, and a landscaping contract for the I-680/I-780 Interchange area in Benicia. The estimated cost of the landscape work is \$4.5 million and will be requested from the TBPOC at a later time.

<u>Table 1</u> <u>New Benicia-Martinez Bridge Allocation Changes</u>

Contract	Previously	Revised Allocated	
	Allocated BATA	BATA RM 1 Funds	
	RM 1 Funds		
New Benicia-Martinez Bridge –	\$ 762,768,000	\$ 759,768,000	
Capital Outlay			
(EA 04-006034)			
BASE Security Camera System –	\$0	\$1,000,000	
Capital Outlay Support			
(EA 04-4A740_)			
BASE Security Camera System –	\$0	\$2,000,000	
Capital Outlay			
(EA 04-4A7404)			
Total	\$ 762,768,000	\$ 762,768,000	

## **ITEM 7: OTHER BUSINESS**

a. TBPOC Closed-Door Discussion